

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Tue 1/3/2012 9:40:22 PM  
**Subject:** VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Jim,

I hope you had a good holiday break and new year, and are looking forward to a great 2012!

Just so you are aware, today we submitted a ORVR document for the 2013 Jetta Hybrid for your review.  
Please let me know if you have any questions.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207



**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 1/3/2012 11:16:45 PM  
**Subject:** Re: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Mike, thanks for the heads up, Verify doesn't notify me. I'll look at it tomorrow.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance and Innovative Strategies Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William" <William.Rodgers@vw.com>  
Date: 01/03/2012 04:40 PM  
Subject: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Jim,

I hope you had a good holiday break and new year, and are looking forward to a great 2012!

Just so you are aware, today we submitted a ORVR document for the 2013 Jetta Hybrid for your review.  
Please let me know if you have any questions.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Wed 1/4/2012 7:10:39 PM  
**Subject:** VW Group - Decision Information for VID VW462\_8-0062\_08\_2  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I submitted new FEDV tests and the decision information to Verify for the VID: VW462\_8-0062\_08 Configuration 2. A manufacturer retest is required for the Highway test due to High Fuel Economy for the ETW.

These new tests and VID configuration are being used for the 2013 Volkswagen CC 2.0 TFSI manual 6-speed which was recently certified in the carryover test group DVWXJ02.03UA. The new data is due to a transmission final drive gearing change effective at the start of 2013 production. It was initially expected that this change would happen later in the year, but instead it will be in place for the entire production run. A revised Initial Application has been uploaded to Verify to reflect the change.

A similar notice is forthcoming for the Bin 3 / PZEV version of this model in test group DVW XV02.03PA.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Thur 1/5/2012 4:57:32 PM  
**Subject:** RE: VW Group - Decision Information for VID 464\_00042  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I submitted the last decision information today and the revised application is forthcoming related to the change described below in my previous message. This submission is for the Volkswagen VID 464\_00042, configuration 1. A manufacturer retest is required for the Highway test due to High Fuel Economy for the ETW.

These tests are being used to represent the T2B3/ SULEV2 version of the 2013 Volkswagen CC 2.0 TFSI manual 6-speed. The same final drive ratio change applies as described below. Please provide your decision for both at your earliest convenience.

Regards,

Bill Rodgers

Emissions Certification Engineer

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Auburn Hills, MI 48436

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office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Rodgers, William  
Sent: Wednesday, January 04, 2012 2:11 PM  
To: 'Jim Snyder'  
Cc: Giles, Michael; Hart, Robert (VWoA)  
Subject: VW Group - Decision Information for VID VW462\_8-0062\_08\_2

Hello Jim,

I submitted new FEDV tests and the decision information to Verify for the VID: VW462\_8-0062\_08 Configuration 2. A manufacturer retest is required for the Highway test due to High Fuel Economy for the ETW.

These new tests and VID configuration are being used for the 2013 Volkswagen CC 2.0 TFSI manual 6-speed which was recently certified in the carryover test group DVWXJ02.03UA. The new data is due to a transmission final drive gearing change effective at the start of 2013 production. It was initially expected that this change would happen later in the year, but instead it will be in place for the entire production run. A revised Initial Application has been uploaded to Verify to reflect the change.

A similar notice is forthcoming for the Bin 3 / PZEV version of this model in test group DVWXXV02.03PA.

Regards,

Bill Rodgers

Emissions Certification Engineer

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**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Mon 1/9/2012 1:12:51 PM  
**Subject:** VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L  
CBI\_DVWXR0110PHE\_RFA\_ORV\_R00.PDF

Hello Lynn,

I was asked by my colleague (Bob Hart) to send you copies of our ORVR submissions. The attachment was recently submitted to Jim Snyder through Verify.

Please call me if you have any questions about this.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Mon 1/9/2012 7:25:41 PM  
**Subject:** VW Group Decision Information - VID: VW324-1-0132, VW324-1-240\_12  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I submitted the following test decision information's to you today. See the decision information comments for detailed explanations. None involve new technology or manufacturer retests.

VID: VW324-1-0132 Configuration 1, for running change adding 2012 Beetle Convertible 2.5L-automatic (T2B5).

VID: VW324-1-240/12 Configuration 2, for running change adding 2012 Beetle Convertible 2.5L-automatic (T2B3/SULEV).

VID: VW324-1-240/12 Configuration 3, for 2013 Passat Cold CO.

Regards,

Bill Rodgers

Emissions Certification Engineer

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**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Mon 1/9/2012 7:27:05 PM  
**Subject:** VW Group - Audi Q5 Hybrid

Hi Jim,

Any shed results yet for last week's test?

Bill

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 1/9/2012 7:59:17 PM  
**Subject:** Re: VW Group - Audi Q5 Hybrid

Not yet but I think it was a valid test. I think we'll see results tuesday morning if not this afternoon yet.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance and Innovative Strategies Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 01/09/2012 02:27 PM  
Subject: VW Group - Audi Q5 Hybrid

Hi Jim,  
Any shed results yet for last week's test?

Bill

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Tue 1/10/2012 12:52:03 PM  
**Subject:** RE: CHUB-Q5A Laboratory Data  
[CHUB-Q5A 01-06-2-12 Evap.pdf](#)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Good morning Bill,

Happy New Year to you! I'm sorry getting this test data to you took soooooo long. Enclosed are the 3 bag FTP and Evap Laboratory results for the Subject vehicle. As always, if you have any questions or concerns, please contact me.

Thanks for you patience!

Best regards,

Vince Mazaitis

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 12/12/2011 01:24 PM  
Subject: RE: CHUB-Q5A Laboratory Data

Hello Vince,

I saw the test results on Verify. Would you mind sending the lab results pages? They are much easier to digest.

Regards,

Bill Rodgers

Emissions Certification Engineer

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From: Mazaitis.Vincent@epamail.epa.gov [mailto:Mazaitis.Vincent@epamail.epa.gov]

Sent: Friday, December 09, 2011 1:04 PM

To: Rodgers, William

Cc: Snyder.Jim@epamail.epa.gov

Subject: Re: CHUB-Q5A Laboratory Data

Hello Bill,

I checked again after lunch and nothing yet. My guess is Monday. Hybrids still take longer. I'll keep on looking though and forward the data as soon as I get it.

Best regards,

Vince Mazaitis

From: "Rodgers, William" <William.Rodgers@vw.com>

To: Vincent Mazaitis/AA/USEPA/US@EPA

Date: 12/09/2011 10:04 AM

Subject: CHUB-Q5A Laboratory Data

Hello Vince,

Have you received any lab test data from yesterday's Audi Q5 Hybrid test? If you could scan and email it to my when you receive it I would appreciate it.

Thanks,

Bill Rodgers

Emissions Certification Engineer

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[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

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**Variable Temperature SHED Report****Test: 72 °F - 96 °F for 48 Hours****Test No: 2011-0324-017****Mfr: 00640 VID: CHUB-Q5A Config: 00**

Test Purpose	1	VTSHED#	VT2
Test Procedure	23	Cert Flag	Y
Fuel Type	61 Tier 2 Cert Test Fuel	Requester	Jim Snyder
Technician_Name	62546	Validators Initials	<u>PDV</u>

**DIURNAL AND TOTAL EVAPORATIVE EMISSIONS**


Started (D@T)	2012/01/06 @ 06:46	Finished (D@T)	2012/01/08 @ 06:47
Start Temp (°F)	72.00	Test Length (hrs)	48
Day 1 Total (gHC)	0.358791	Diurnal (gHC)	0.358791
Day 2 Total (gHC)	0.277682	Hot_Soak_HC_(g)	0.053947
Day 3 Total (gHC)	N/A	Total Emissions (gHC)	<b>0.412739</b>

**QUALITY CONTROL CHECKS**

- ☒ 1. Was the Vehicle Soak-Time greater than or equal to 6?  
The Vehicle Soak-Time was 19:21:40.
- ☒ 2. Was the Vehicle Soak-Temperature during the final 6 hours 72 +/- 3 °F?  
The largest Vehicle Soak-Temperature deviation during the final 6 hours was 71.85 °F.
- ☒ 3. Was the Time-Difference between closing & sealing the SHED 0 +/- 5 min?  
The Time-Difference between closing & sealing the SHED was 0.00 min.
- ☒ 4. Was the SHED Feedback minus Setpoint Temperature (Underbody) 0 +/- 3 °F?  
The difference was 0.62 °F.
- ☒ 5. Was the Average of SHED Feedback minus SHED Setpoint Temperature 0 +/- 2 °F?  
The difference was 0.15 °F.
- ☒ 6. Was the Average Left & Right Sidewall minus SHED Setpoint Temperature 0 +/- 5 °F?  
The difference was 1.73 °F.
- ☒ 7. Was the Cold-Water-In-Temp greater than or equal to 40 °F?  
The Minimum Cold-Water-In-Temp was 59.22 °F.
- ☒ 8. Was the Inside versus Outside Differential Pressure 0 +/- 2 inH20?  
The Differential-Pressure at its largest deviation was 0.21 inH20.
- ☒ 9. Was the 1-day HC-Value taken at 1440 +/- 6 min?  
The 1-day HC-Value was taken at 1440.15 min.
- ☒ 10. Was the 2-day HC-Value taken at 2880 +/- 6 min?  
The 2-day HC-Value was taken at 2880.15 min.

FTP TID: 018 - Hot Soak TID: 018 - VERIFY Status: Unknown

**QC Note: All Automated Quality Checks Passed**

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Information			Vehicle ID: CHUB-Q5A				
	Test Date: 1/5/2012		MFR Name: AUDI				
	Key Start / Hot Soak: 08:33:42 / 09:51		MFR Codes: 640 ADX				
	Fuel Container ID: F00023		Config #: 00				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: S				
	Test Procedure: 21 Federal fuel 2-day exhaust (w/can loa		Shift Schedule: A09980005				
	Calculation Method: Gasoline		Beginning Odometer: 005050.0 MI				
Pretest Remarks:			Drive Schedule: flp3bag				
			Soak Period: 18.6 hours				
<b>Bag Data</b>							
	HC-FID	CO	NOx	CO2	CH4	NonMeth HC	
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
<b>Phase 1</b>							
Sample	6.549	28.345	1.441	1.001	2.834		
Ambient	2.624	0.000	0.014	0.044	2.062		
Net Concentration	4.121	28.345	1.428	0.960	0.926	3.024	
Remarks:							
<b>Phase 2</b>							
Sample	2.673	7.033	0.455	0.496	2.027		
Ambient	2.652	0.000	0.019	0.043	2.067		
Net Concentration	0.120	7.033	0.437	0.455	0.036	0.077	
Remarks:							
<b>Phase 3</b>							
Sample	2.762	25.358	0.370	0.798	2.080		
Ambient	2.647	0.000	0.022	0.044	2.081		
Net Concentration	0.273	25.358	0.349	0.756	0.123	0.128	
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks: This test has SHED results. SHED Test Number = 2011-0324-018							
<b>Results</b>							
	HC-FID	CO	NOx	CO2	CH4	NMHC / NMOG	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.053	0.735	0.055	391.2	0.014	0.039 / 0.040	22.739
Phase 2	0.002	0.289	0.027	294.1	0.001	0.002 / 0.002	30.304
Phase 3	0.003	0.655	0.013	306.9	0.002	0.002 / 0.002	28.987
Weighted	0.01317	0.48189	0.02883	317.671	0.00379	(NMOG=1.04xNMHC) 0.0093 / 0.0097	
<b>Fuel Economy</b>							
	Gasoline MPG	Dyno Settings				Dyno #: D329 - AWD	
Phase 1	22.69	3 bag Hybrid test for evap OB 1-9-12				Inertia: 4750	
Phase 2	30.23					EPA Set Co A: -9.61	
Phase 3	28.92					EPA Set Co B: -0.164	
Weighted	27.93					EPA Set Co C: 0.02573	
						Emiss-Bench: Mexa 7200sie	



# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2011-0324-018

Vehicle ID: CHUB-Q5A

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.189	2.628	0.196	1399.2	0.049	0.139	1.185
Phase 2	0.009	1.117	0.103	1134.7	0.003	0.006	
Phase 3	0.013	2.347	0.048	1100.0	0.007	0.006	

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.01	29.00	29.00	
Avg Cell Temp (degF)	75.23	75.27	75.33	
Dew Point (degF)	48.28	48.32	48.25	
Specific Humidity (grains/lbm)	51.77	51.85	51.73	
NOx Corr Factor	0.9016	0.9019	0.9014	
CO2 Dilution Factor	13.344	26.946	16.742	
CFV Vmix (scf @68F)	2812.48	4817.24	2807.46	
CVS Flow Rate Avg (scfm)	332.71	332.41	332.51	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.20	869.50	506.60	
Distance (miles)	3.577	3.859	3.584	
Bag Analysis Time (secs)	879.0	1112.1	160.6	

### MFR Test Results

for Procedure 21 Federal fuel 2-day exhaust (w/can load)

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0163	0.51	0.03	306	0	0.0136

Odometer  
4448 M

MPG  
29

MPG is 3.82 % higher than EPA MPG

MFR Lab: Audi AG Neckarsulm

Dyno: 7

Fuel: 61 Tier 2 Cert Gasoline

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Tue 1/10/2012 2:55:36 PM  
**Subject:** VW Group - Audi Q5 Hybrid standards

Hi Jim,

As a follow up to your call, the Q5 Hybrid Evap standards in Verify are incorrectly stated as LDT (6,001-8,500 GVWR standards). I will update Verify to reflect the correct LDT (6,000 GVWR and under) standards. It also looks like I need to correct the curb weight in Section 12 of the application so I will include that in the revised application. Thanks for the feedback.

Bill

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Tue 1/10/2012 3:53:50 PM  
**Subject:** RE: VW Group - Audi Q5 Hybrid standards

Hi Jim,

We have confirmed that the test data is acceptable, please release the vehicle for pick-up.

My message below regarding the standards in Verify is incorrect. After further investigation, I found that the Evap standards in the Verify system test group information were corrected on October 13, 2011 to reflect the LDT (6,000 GVWR and under) standards. At that time we submitted a revised Initial Application with new Sec. 7 CSI named CBI\_CADXT02.0HUB\_APP\_INI\_R01.PDF. It appears the erroneous information you have is based on the initial submission.

Thanks,

Bill

From: Rodgers, William  
Sent: Tuesday, January 10, 2012 9:56 AM  
To: 'Jim Snyder'  
Subject: VW Group - Audi Q5 Hybrid standards

Hi Jim,

As a follow up to your call, the Q5 Hybrid Evap standards in Verify are incorrectly stated as LDT (6,001-8,500 GVWR standards). I will update Verify to reflect the correct LDT (6,000 GVWR and under) standards. It also looks like I need to correct the curb weight in Section 12 of the application so I will include that in the revised application. Thanks for the feedback.

Bill

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 1/10/2012 6:03:09 PM  
**Subject:** RE: VW Group - Audi Q5 Hybrid standards

Let Ben Haynes know when you decide when you will pick it up. 734-214-4261

It still shows the wrong limit in at least some parts of Verify. I'll have to look around and see where it wasn't updated.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance and Innovative Strategies Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Rodgers, William" <William.Rodgers@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 01/10/2012 10:55 AM  
**Subject:** RE: VW Group - Audi Q5 Hybrid standards

Hi Jim,  
We have confirmed that the test data is acceptable, please release the vehicle for pick-up.

My message below regarding the standards in Verify is incorrect. After further investigation, I found that the Evap standards in the Verify system test group information were corrected on October 13, 2011 to reflect the LDT (6,000 GVWR and under) standards. At that time we submitted a revised Initial Application with new Sec. 7 CSI named CBI\_CADXT02.0HUB\_APP\_INI\_R01.PDF. It appears the erroneous information you have is based on the initial submission.

Thanks,  
Bill

**From:** Rodgers, William  
**Sent:** Tuesday, January 10, 2012 9:56 AM  
**To:** 'Jim Snyder'  
**Subject:** VW Group - Audi Q5 Hybrid standards

Hi Jim,  
As a follow up to your call, the Q5 Hybrid Evap standards in Verify are incorrectly stated as LDT (6,001-8,500 GVWR standards). I will update Verify to reflect the correct LDT (6,000 GVWR and under) standards. It also looks like I need to correct the curb weight in Section 12 of the application so I will include that in the revised application. Thanks for the feedback.

Bill

**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Tue 1/10/2012 6:11:49 PM  
**Subject:** 2013 EPA 5-Cycle Calculator

Hello Bob;

I was just wondering if you were going to add the calculated combined fuel economy and CO2 values to your calculator in your next revision?

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA;"Kata, Leonard" [Leonard.Kata@vw.com]; Kata, Leonard" [Leonard.Kata@vw.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Wed 1/11/2012 11:47:39 AM  
**Subject:** RE: 2013 EPA 5-Cycle Calculator  
<http://www.epa.gov/nvfel/>  
<http://www.epa.gov/nvfel/>

Okay Bob, no problem. Thanks for incorporating it into the calculator.

I realize that you are a busy guy, sorry to keep pestering you. On another related subject, were you able to make any progress to the Volkswagen Group 2011 CAFE file like the file you sent me last year for the final 2010 CAFE? See attached e-mail.

I have a colleague working on gathering all the final sales numbers to prepare the 2011 VWGoA final CAFE report and I want to begin working on that as soon as possible and before I have to begin calculating 2013 fuel economy labels. Our IT people are working vigorously to create a system to support the new 2013 fuel economy labels.

Best regards,

Richard

From: Robert Peavyhouse [mailto:Peavyhouse.Robert@epamail.epa.gov]  
Sent: Tuesday, January 10, 2012 3:59 PM  
To: Thomas, Richard (EEO)  
Subject: Re: 2013 EPA 5-Cycle Calculator

Richard,

I am more than willing to, I just haven't had a chance to work on that project for a while.

Robert Peavyhouse  
Compliance and Innovative Strategies Division  
U.S. EPA - Office of Transportation and Air Quality  
phone: (734) 214-4814  
fax: (734) 214-4869  
email: peavyhouse.robert@epa.gov  
website: <http://www.epa.gov/nvfel/>

From: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
To: Robert Peavyhouse/AA/USEPA/US@EPA  
Cc: David Good/AA/USEPA/US@EPA  
Date: 01/10/2012 01:12 PM  
Subject: 2013 EPA 5-Cycle Calculator

Hello Bob;

I was just wondering if you were going to add the calculated combined fuel economy and CO2 values to your calculator in your next revision?

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

Received: from vwoaahsxb101.vwoa.na.vwg ([10.136.103.218]) by VWOAAHSXH001.vwoa.na.vwg with Microsoft SMTPSVC(6.0.3790.4675); Mon, 3 Oct 2011 10:50:21 -0400  
Received: from mailgate1.vw.com ([10.136.103.246]) by vwoaahsxb101.vwoa.na.vwg with Microsoft SMTPSVC(6.0.3790.4675); Mon, 3 Oct 2011 10:50:20 -0400  
Received: from localhost (localhost [127.0.0.1]) by amgwyin01.vwoa.na.vwg (MOS 4.1.9-GA) id HPA57049; Mon, 3 Oct 2011 10:50:20 -0400 (EDT)  
Received: from mblast02.rtp.epa.gov (mblast02.rtp.epa.gov [134.67.221.152]) by amgwyin01.vwoa.na.vwg (MOS 4.1.9-GA) with ESMTMP id HPA57038; Mon, 3 Oct 2011 10:50:17 -0400  
Received: from mblast02.rtp.epa.gov (localhost.localdomain [127.0.0.1]) by localhost (Postfix) with SMTP id 808054440B for <Richard.Thomas@vw.com>; Mon, 3 Oct 2011 10:41:24 -0400 (EDT)  
Received: from mintra02.rtp.epa.gov (mintra02.rtp.epa.gov [134.67.221.154]) by mblast02.rtp.epa.gov (Postfix) with ESMTMP id 790C7442FB for <Richard.Thomas@vw.com>; Mon, 3 Oct 2011 10:41:24 -0400 (EDT)  
Received: from mintra02.rtp.epa.gov (localhost.localdomain [127.0.0.1]) by localhost (Postfix) with SMTP id 6202E443BB for <Richard.Thomas@vw.com>; Mon, 3 Oct 2011 10:41:24 -0400 (EDT)  
Received: from epahub11.rtp.epa.gov (v18h1drtgu011.aa.ad.epa.gov [134.67.222.133]) by mintra02.rtp.epa.gov (Postfix) with ESMTMP id 57032443DC for <Richard.Thomas@vw.com>; Mon, 3 Oct 2011 10:41:24 -0400 (EDT)  
From: "Peavyhouse.Robert@epamail.epa.gov" <Peavyhouse.Robert@epamail.epa.gov>  
To: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
Subject: Re: CAFE and the custom data  
Date: Mon, 3 Oct 2011 14:41:23 +0000  
Message-ID: <OFDB521B68.F7BB4436-ON8525791E.00509819-8525791E.0050B1DD@epamail.epa.gov>  
In-Reply-To: <42B68924F222AB40986DF38DDCBE99980112A521@VWOAAHSXH001.vwoa.na.vwg>  
Content-Type: multipart/alternative;



boundary="\_000\_OFDB521B68F7BB4436ON8525791E005098198525791E0050B1DDepa\_"  
Content-Language: en-US  
Thread-Topic: CAFE and the custom data  
Thread-Index: AcyB28dTZlkemm63SOKrEWsekSm/kQ==  
References: <42B68924F222AB40986DF38DDCBE99980112A521@VWOOAHSXH001.vwoa.na.vwg>  
X-MS-Has-Attach:  
X-MS-TNEF-Correlator:  
MIME-Version: 1.0

Richard,

I will start working on converting it to the new format.

Robert Peavyhouse  
Compliance and Innovative Strategies Division  
U.S. EPA - Office of Transportation and Air Quality  
phone: (734) 214-4814  
fax: (734) 214-4869  
email: peavyhouse.robert@epa.gov  
website: <http://www.epa.gov/nvfel/>

From: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
To: Robert Peavyhouse/AA/USEPA/US@EPA  
Cc: David Good/AA/USEPA/US@EPA  
Date: 10/03/2011 10:30 AM  
Subject: CAFE and the custom data

Hello Bob;

Earlier this year you provided me with a data file that you configured to put all the general label index files together for the 2010 final CAFE. I could open it in Verify and change the volumes to add the final numbers and also eliminate tests numbers not needed for the CAFE (i.e.: Cold Co, SC03, US06). This was a great time saver as you know and I wondered if this is something that you will perform for us again next year when we prepare the 2011 model year Final CAFE Reports?

Please let me know your thoughts, as we have finished testing release 9 in house, without any major difficulties. This one point came up in loading only a few indexes into the CAFE section.

If not, then I must have our guys here put together a program to perform this task on the label indexes.

Thanks,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)

Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

**To:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Wed 1/11/2012 8:02:00 PM  
**Subject:** CHUB-Q5

Hello Jim,

The corrected Evap results are in Verify. It did not/does not erase or change the initial entry.

Thanks,

Vince Mazaitis

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Tue 1/17/2012 12:45:11 PM  
**Subject:** RE: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Lynn,

The Bugatti reference is a copy / paste error.

We will send a correction as soon as possible.

Thanks,  
Mike

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Friday, January 13, 2012 3:55 PM  
To: Giles, Michael  
Subject: Re: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Dear Mr. Giles,

Thank you for the ORVR application below. I have a few questions before I forward the application to my team members: there are several references to Bugatti in the application. Is this family identical to a Bugatti family? Items 3 and 4 specifically mention Bugatti. What is the connection with Bugatti and this VW evap family?

Thanks for your answers.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 01/09/2012 08:13 AM  
Subject: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Lynn,

I was asked by my colleague (Bob Hart) to send you copies of our ORVR submissions. The attachment was recently submitted to Jim Snyder through Verify.

Please call me if you have any questions about this.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

[attachment "CBI\_DVWXR0110PHE\_RFA\_ORV\_R00.PDF" deleted by Lynn  
Sohacki/AA/USEPA/US]

**To:** Lynn Sohacki/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA[]; obert Peavyhouse/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Tue 1/17/2012 1:11:20 PM  
**Subject:** RE: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L  
CBI DVWXR0110PHE RFA ORV R01.pdf

Hi Lynn,

My apologies for the confusion. I made corrections to the attached document, which was also submitted to VERIFY.

After discussion with our information provider I corrected the brand and model year on pages 2 and 3.

Regards  
Mike

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Friday, January 13, 2012 3:55 PM  
To: Giles, Michael  
Subject: Re: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Dear Mr. Giles,

Thank you for the ORVR application below. I have a few questions before I forward the application to my team members: there are several references to Bugatti in the application. Is this family identical to a Bugatti family? Items 3 and 4 specifically mention Bugatti. What is the connection with Bugatti and this VW evap family?

Thanks for your answers.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 01/09/2012 08:13 AM  
Subject: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Lynn,

I was asked by my colleague (Bob Hart) to send you copies of our ORVR submissions. The attachment was recently submitted to Jim Snyder through Verify.

Please call me if you have any questions about this.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

[attachment "CBI\_DVWXR0110PHE\_RFA\_ORV\_R00.PDF" deleted by Lynn  
Sohacki/AA/USEPA/US]

**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Thomas, Suanne" [Suanne.Thomas@vw.com]; Thomas, Suanne" [Suanne.Thomas@vw.com]; Rodgers, William" [William.Rodgers@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US  
**Sent:** Tue 1/17/2012 2:03:03 PM  
**Subject:** RE: VW Group - OBD Approval Request DVW-I5 (Federal Only)

Michael,

Please provide OBD threshold test results from the new 2013 OBD system. Since this is a carry-over system, and you have removed the secondary air system, which can significantly reduce the tailpipe emission levels, the emission and OBD threshold data generated for the 2012 system is no longer valid.

Please provide documentation showing that new OBD threshold data was generated for each of the major monitors without the secondary air system and that the MIL set for those monitors at or below the 1.5x threshold. Provide detailed test data including test vehicle IDs, test numbers and test dates that the OBD data was generated. (This can be in table form, doesn't have to be actual dyno data).

Once you can show me that all new OBD threshold testing data was generated for this new system, I won't have any issues approving this OBD system.

Robert Peavyhouse  
Compliance and Innovative Strategies Division  
U.S. EPA - Office of Transportation and Air Quality  
phone: (734) 214-4814  
fax: (734) 214-4869  
email: peavyhouse.robert@epa.gov  
website: <http://www.epa.gov/nvfel/>

From: "Giles, Michael" <michael.giles@vw.com>  
To: Robert Peavyhouse/AA/USEPA/US@EPA  
Cc: "Thomas, Suanne" <Suanne.Thomas@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>, "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
Date: 01/10/2012 03:24 PM  
Subject: RE: VW Group - OBD Approval Request DVW-I5 (Federal Only)

Hello Bob,

Could you please give us a status report for this Federal OBD approval request? We are just trying to monitor the timing for all of our open requests.

Thanks,  
Mike

From: Giles, Michael  
Sent: Friday, November 18, 2011 2:37 PM  
To: (Peavyhouse.Robert@epamail.epa.gov)  
Cc: Thomas, Suanne; Rodgers, William; Hart, Robert (VWoA)



Subject: VW Group - OBD Approval Request DVW-I5 (Federal Only)

Hello Robert,

Attached, please find a PDF file with carryover OBD description (approval request) for MY 2013 Volkswagen OBD Group DVW-I5 (Federal), submitted for your approval.

Please note, this approval request corresponds to 2 test groups: DVWXV02.5A35 (automatic trans) and DVWXV02.5M35 (manual). The models involved are Passat, Jetta, Jetta SportWagen, Golf, Beetle, Beetle Convertible.

Also, two copies of this document have been uploaded today to VERIFY (same document, but one was renamed to cover each of the test groups).

Please review for approval and send your feedback or any questions you may have at your earliest convenience.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA;"Thomas, Suanne" [Suanne.Thomas@vw.com]; Thomas, Suanne" [Suanne.Thomas@vw.com]; Rodgers, William" [William.Rodgers@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Tue 1/17/2012 3:32:44 PM  
**Subject:** RE: VW Group - OBD Approval Request DVW-I5 (Federal Only)  
<http://www.epa.gov/nvfel/>

Hello Robert,

I forwarded your questions to our colleagues in Germany and will reply with their feedback as soon as it is received.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

From: Robert Peavyhouse [mailto:Peavyhouse.Robert@epamail.epa.gov]  
Sent: Tuesday, January 17, 2012 9:03 AM  
To: Giles, Michael

Cc: Jim Snyder; Thomas, Suanne; Rodgers, William; Hart, Robert (VWoA)  
Subject: RE: VW Group - OBD Approval Request DVW-I5 (Federal Only)

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Robert Peavyhouse  
Compliance and Innovative Strategies Division  
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phone: (734) 214-4814  
fax: (734) 214-4869  
email: peavyhouse.robert@epa.gov  
website: <http://www.epa.gov/nvfel/>

From: "Giles, Michael" <michael.giles@vw.com>  
To: Robert Peavyhouse/AA/USEPA/US@EPA  
Cc: "Thomas, Suanne" <Suanne.Thomas@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>, "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
Date: 01/10/2012 03:24 PM  
Subject: RE: VW Group - OBD Approval Request DVW-I5 (Federal Only)

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Thanks,  
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Sent: Friday, November 18, 2011 2:37 PM  
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Cc: Thomas, Suanne; Rodgers, William; Hart, Robert (VWoA)  
Subject: VW Group - OBD Approval Request DVW-I5 (Federal Only)

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Also, two copies of this document have been uploaded today to VERIFY (same document, but one was renamed to cover each of the test groups).

Please review for approval and send your feedback or any questions you may have at your earliest convenience.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Tue 1/17/2012 7:58:24 PM  
**Subject:** Assistance with identifying vehicles for test family R104

Hi, Sebastian.

We are having a difficult time identifying vehicles for class R104. We received positive responses from owners of these vehicles but I'm having a hard time determining the test group to which these vehicles belong. Would you please let me know the test groups for these vehicles?

Thank you,

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

R104/0077 - 2009 Audi A5, VIN# V

R104/0049 - 2009 Audi A4, VIN# V

R104/0080 - 2009 Audi A5, VIN# V

R104/0061 - 2009 Audi A5, VIN# V

**Ex. 6**

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Tue 1/17/2012 9:08:50 PM  
**Subject:** Assistance with identifying vehicles for test family R104  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

Here is what I found out:

· R104/0077 - 2009 Audi A5 Coupe, VIN# **Ex. 6** 9ADXV03.23LC LEV II - LEV / Tier 2 - BIN 5

· R104/0049 - 2009 Audi A4 Sedan, VIN# **Ex. 6** 9ADXV03.23LC LEV II - LEV / Tier 2 - BIN 5

· R104/0080 - 2009 Audi A5 Coupe , VIN# **Ex. 6** 9ADXV03.23LC LEV II - LEV / Tier 2 - BIN 5

· R104/0061 - 2009 Audi A5 Coupe, VIN# **Ex. 6** 9ADXV03.23LC LEV II - LEV / Tier 2 - BIN 5

Would be great if you let us know when a car comes in, so that we can inspect it.

Let me know if you have any questions.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Berenz, Sebastian" [Sebastian.Berenz@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Tue 1/17/2012 9:15:11 PM  
**Subject:** Re: Assistance with identifying vehicles for test family R104  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hi, Sebastian.

We will let you know the week before the cars come in so that you can attend the maintenance.

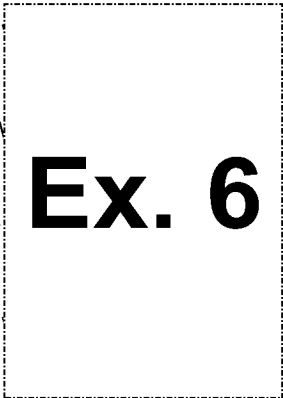
Thanks for your help!

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Berenz, Sebastian" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 01/17/2012 04:08 PM  
Subject: Assistance with identifying vehicles for test family R104

Hello Lynn,

Here is what I found out:

· R104/0077 - 2009 Audi A5 Coupe, VIN#		AD XV03.23LC LEV II - LEV / Tier 2 -
BIN 5		
· R104/0049 - 2009 Audi A4 Sedan, VIN#		AD XV03.23LC LEV II - LEV / Tier 2 -
BIN 5		
· R104/0080 - 2009 Audi A5 Coupe , VIN#		AD XV03.23LC LEV II - LEV / Tier 2 -
BIN 5		
· R104/0061 - 2009 Audi A5 Coupe, VIN#		AD XV03.23LC LEV II - LEV / Tier 2 -
BIN 5		

Would be great if you let us know when a car comes in, so that we can inspect it.  
Let me know if you have any questions.

Best regards

Sebastian Berenz



Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Thur 1/19/2012 1:38:58 PM  
**Subject:** FW: VW Group - EPA test resubmission  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Jim,

Just FYI.

Regards,

Bill

From: Rodgers, William  
Sent: Wednesday, January 18, 2012 11:07 AM  
To: 'Peavyhouse.Robert@epamail.epa.gov'  
Cc: Giles, Michael; Hart, Robert (VWoA)  
Subject: VW Group - EPA test resubmission

Hello Bob,

The following EPA confirmatory test needs to be resubmitted in order to process a particular 2012 test group file.

Test Number: BVWX91000704

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

To: "[redacted]@ford.com]; ill Pagels  
[bill.pagels@meidenamerica.com]; ob Maxwell [remaxwell@comcast.net]; hris  
Nevers/AA/USEPA/US@EPA [redacted]@gm.com]; [redacted]  
[redacted]@gm.com]; [redacted]@na.mitsubishi-motors.com]; [redacted]  
[redacted]@na.mitsubishi-motors.com]; [redacted]@anl.gov]; [redacted]  
[redacted]@chrysler.com]; [redacted]@chrysler.com]; im  
Snyder/AA/USEPA/US@EPA; [redacted]@bepco.com]; [redacted]  
[Keith.Thompson@bepco.com]; ent Theil [okt@chrysler.com]; kyle.bedsole@gm.com"  
[redacted]@gm.com]; [redacted]@chrysler.com]; [redacted]  
[redacted]@tc.gc.ca]; [redacted]@ganassi.com]; [redacted]@sae.org"  
[redacted]@sae.org]; [redacted]@tc.gc.ca]; [redacted]N.)"  
[redacted]@mazda.co.jp]; 'Paulina.Carl@epamail.epa.gov"  
['Paulina.Carl@epamail.epa.gov']; [redacted]@ford.com];  
[redacted]@yahoo.com]; Suanne.Thomas@vw.com" [Suanne.Thomas@vw.com];  
[redacted]@ahm.honda.com" [redacted]@ahm.honda.com]; [redacted]  
[redacted]@nrd.nissan-usa.com]; [redacted]  
Schrodt/AA/USEPA/US@EPA; [redacted]@tema.toyota.com"  
[redacted]@tema.toyota.com'; [redacted]@tema.toyota.com"  
[redacted]@tema.toyota.com'; [redacted]@ahm.honda.com"  
[redacted]@ahm.honda.com'; [redacted]  
[redacted]@tema.toyota.com]

From: "Glodich, Jeffrey (J.M.)"  
Sent: Fri 1/20/2012 6:35:58 PM  
Subject: J2951 Phase II Review

Purpose:

- Discuss implementation and macro issues
- Revisit deferred issues that were not addressed in the initial publication

Meeting Info:

**Ex. 6**

Web Address <https://www.connectmeeting.att.com><<https://www.connectmeeting.att.com>>

**Ex. 6**

**To:** "Beierschmitt, Thomas (T.A.)" [tbeiers1@ford.com]; ill Pagels [bill.pagels@meidenamerica.com]; ob Maxwell [remaxwell@comcast.net]; hris Nevers/AA/USEPA/US@EPA; Dave Kosmalski [david.kosmalski@gm.com]; ave Kosmalski [david.kosmalski@gm.com]; ennis Pawlak [Dennis.Pawlak@na.mitsubishi-motors.com]; ouglas Reid [Douglas.Reid@na.mitsubishi-motors.com]; Duoba, Mike" [mduoba@anl.gov]; eff Foor [jdf14@chrysler.com]; im Smith [james.smith@chrysler.com]; im Snyder/AA/USEPA/US@EPA; Keith Thompson [Keith.Thompson@bepco.com]; eith Thompson [Keith.Thompson@bepco.com]; ent Theil [okt@chrysler.com]; kyle.bedsole@gm.com" [kyle.bedsole@gm.com]; ahmoud Yassine [mky@chrysler.com]; arc Belzile [marc.a.belzile@tc.gc.ca]; ark paxton [mpaxton@ganassi.com]; 'MBrussow@sae.org" ['MBrussow@sae.org']; Meyer, Norm" [norm.meyer@tc.gc.ca]; Okawa, Naoyasu (N.)" [okawa.n@mazda.co.jp]; 'Paulina.Carl@epamail.epa.gov" ['Paulina.Carl@epamail.epa.gov']; Peabody, Jason (J.A.)" [jpeabod6@ford.com]; ete Janosi [petejanosi@yahoo.com]; Suanne.Thomas@vw.com" [Suanne.Thomas@vw.com]; takashi\_a\_fujiwara@ahm.honda.com" [takashi\_a\_fujiwara@ahm.honda.com]; iffany Jackson [JacksT2@nrd.nissan-usa.com]; homas Schrodt/AA/USEPA/US@EPA;"tom.beierschmitt@tema.toyota.com" ['tom.beierschmitt@tema.toyota.com']; 'tom.beierschmitt@tema.toyota.com" ['tom.beierschmitt@tema.toyota.com']; 'tommy\_chang@ahm.honda.com" ['tommy\_chang@ahm.honda.com']; illiam Meschievitz [william.meschievitz@tema.toyota.com]

**From:** "Glodich, Jeffrey (J.M.)"  
**Sent:** Fri 1/20/2012 6:35:58 PM  
**Subject:** J2951 Phase II Review

Rescheduled due to conflicts.

Purpose:

- Discuss implementation and macro issues
- Revisit deferred issues that were not addressed in the initial publication

Meeting Info:

**Ex. 6**

Web Address <https://www.connectmeeting.att.com><<https://www.connectmeeting.att.com/>>

**Ex. 6**

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Wed 1/25/2012 2:42:24 PM  
**Subject:** In-use vehicles scheduled for next week  
[parameters form.xlsx](#)

Hi, Sebastian.

Listed below is the information for the vehicles that we have scheduled for next week.

R104RXX-0049 (2009 Audi/A4) - VIN#	<b>Ex. 6</b>	1000 Veh. Pick up on 1/31/12 (Tuesday)
R104RXX-0077 (2009 Audi/A5) - VIN#		0900 Veh. Pick up on 2/1/12 (Wednesday)
R104RXX-0061 (2009 Audi/A5) - VIN#		1000 Veh. Pick up on 2/2/12 (Thursday)

Please use the new attached form to send testing information to me for these vehicles before pick-up. Return the attached form in excel format so that the values may be automatically transferred to our testing network.

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

- \*disabling traction control, stability control and any load leveling the vehicle may have\*
- preferred method for loading the canister
- preferred fuel drain method
- any special starting procedures
- ABS disabling instructions
- for flex-fuel vehicles, the fuel switch procedure

I will pass this information along to our contractor, URS, and lab personnel. Paper copies or e-mails sent directly to URS or lab personnel may result in incorrect information being distributed.

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** Ex. 7  
**Sent:** Wed 1/25/2012 4:01:31 PM  
**Subject:** Verify Alternate Manuf.docx  
[Verify Alternate Manuf.docx](#)

Hi Jim,

Here is how Verify is set up for VW Alternate Manufacturers. You will notice that a VW is set up to allowing Porsche access test data for the test group/Evap family listed only. Audi and Bugatti get general access by model year.

Hope this helps.

Ex. 7

PS - Ex. 7 has a (May?) 2011 EPA presentation on Stop-start he will forward to you.

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Wed 1/25/2012 4:12:03 PM  
**Subject:** RE: In-use vehicles scheduled for next week

parameters form	<b>Ex. 6</b>	R104RXX-0061.xlsx
parameters form		R104RXX-0077.xlsx
parameters form		R104RXX-0049.xlsx
test procedure 3.2		

Hello Lynn,

Please see attached the parameter sheets for the vehicles you are going to get tested next week. We will assist with explaining the drain and refill procedure when we are at your lab to inspect the vehicles.

The procedure is similar to the 3.1 Audis we have done before.

Let me know if there are any questions.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Wednesday, January 25, 2012 9:42 AM  
To: Berenz, Sebastian  
Subject: In-use vehicles scheduled for next week

Hi, Sebastian.

Listed below is the information for the vehicles that we have scheduled for next week.

R104RXX-0049 (2009 Audi/A4) - VIN# **Ex. 6** 1000 Veh. Pick up on 1/31/12 (Tuesday)



R104RXX-0077 (2009 Audi/A5) - VIN#

**Ex. 6**

0900 Veh. Pick up on 2/1/12 (Wednesday)

R104RXX-0061 (2009 Audi/A5) - VIN#

1000 Veh. Pick up on 2/2/12 (Thursday)

Please use the new attached form to send testing information to me for these vehicles before pick-up. Return the attached form in excel format so that the values may be automatically transferred to our testing network.

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

\*disabling traction control, stability control and any load leveling the vehicle may have\*

preferred method for loading the canister

preferred fuel drain method

any special starting procedures

ABS disabling instructions

for flex-fuel vehicles, the fuel switch procedure

I will pass this information along to our contractor, URS, and lab personnel. Paper copies or e-mails sent directly to URS or lab personnel may result in incorrect information being distributed.

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: parameters form.xlsx)



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number: R104RXX-0061

Equivalent Test Weight: 3875.0 Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity: 16.9 Gallons 40% Fill 6.8 Gallons

Drive Axle: 15 (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required) FTP HWY US06

### Vehicle Target Road-Load Coefficients

A 39.00 Lb-force

B 0.3200 Lb-force\*mpH

C 0.01770 Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

140 Grams (Integer Only: Canister Working Capacity)

1 Number of Canisters (Integer Only: Number of Canisters)

2600 Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)? N (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: Date:

EG&G Representative: Date:

EPA Representative: Date:



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

**EPA Vehicle Control Number:**

**Equivalent Test Weight:**  Pounds (Integer Only: Equivalent Test Weight)

**Nominal Fuel Tank Capacity:**  Gallons **40% Fill**  Gallons

**Drive Axle:**  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

**Mfr. Shift Schedule (if required)**  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

**A**  Lb-force

**B**  Lb-force\*mpH

**C**  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

**Canister Loading Process:**

**Fuel Draining Process:**

**ABS Disabling Process:**

**Fuel Switch Process (Flex Fuel only):**

**Comments:**

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number: R104RXX-0049

Equivalent Test Weight: 4250.0 Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity: 16.9 Gallons 40% Fill 6.8 Gallons

Drive Axle: 15 (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required) FTP HWY US06

### Vehicle Target Road-Load Coefficients

A 38.00 Lb-force

B 0.4800 Lb-force\*mpH

C 0.01820 Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

140 Grams (Integer Only: Canister Working Capacity)

1 Number of Canisters (Integer Only: Number of Canisters)

2600 Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)? N (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

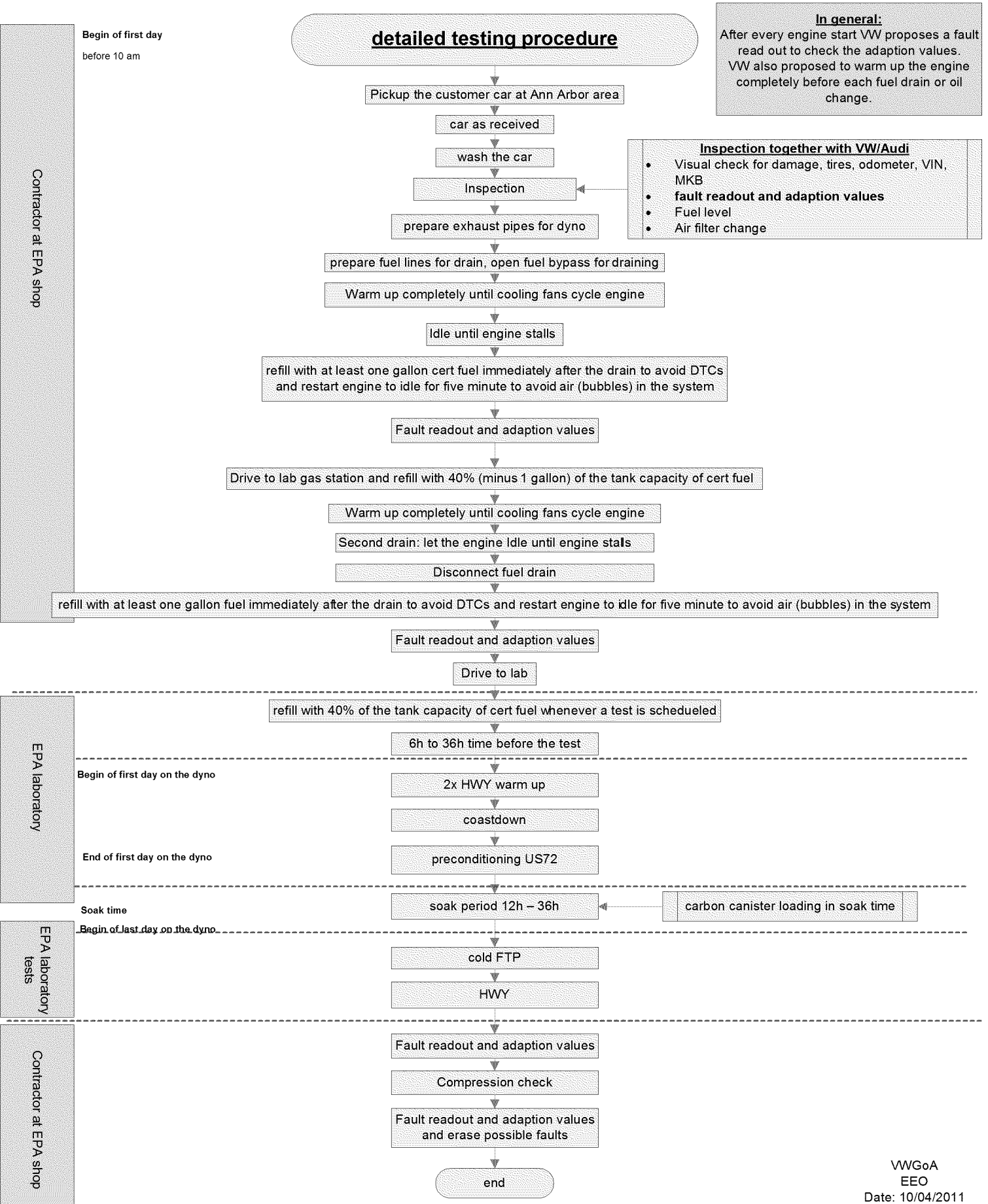
This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: Date:

EG&G Representative: Date:

EPA Representative: Date:



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Wed 1/25/2012 6:14:51 PM  
**Subject:** VW Group - Decision Information  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I submitted the T2B5/ULEV VW CC tests and Decision Information we discussed this morning regarding a test data resubmission as 2013 model year, intended to replace the 2008 model year data you previously waived. The new Vehicle ID is: VW462 8-0062/13\_Configuration 0. Please waive the confirmatory testing so I can enter the manufacturer confirmatory HWY test we did.

There will be another similar resubmission coming for the corresponding T2B3/SULEV version of this car.

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Wed 1/25/2012 7:45:02 PM  
**Subject:** RE: VW Group - Decision Information  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Jim,

The Decision Information for the T2B3 version was submitted as mentioned below. Please waive these also.

Vehicle ID: 464 00042/13, Configuration 0

Hopefully, I can avoid doing this again!

Bill

From: Rodgers, William  
Sent: Wednesday, January 25, 2012 1:15 PM  
To: 'Jim Snyder'  
Cc: Giles, Michael  
Subject: VW Group - Decision Information

Hello Jim,

I submitted the T2B5/ULEV VW CC tests and Decision Information we discussed this morning regarding a test data resubmission as 2013 model year, intended to replace the 2008 model year data you previously waived. The new Vehicle ID is: VW462 8-0062/13\_Configuration 0. Please waive the confirmatory testing so I can enter the manufacturer confirmatory HWY test we did.

There will be another similar resubmission coming for the corresponding T2B3/SULEV version of this car.

Thanks,

Bill Rodgers



Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 1/26/2012 8:26:21 PM  
**Subject:** RE: VW Group - Decision Information  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

I waived them.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance and Innovative Strategies Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>  
Date: 01/25/2012 02:44 PM  
Subject: RE: VW Group - Decision Information

Jim,  
The Decision Information for the T2B3 version was submitted as mentioned below. Please waive these also.  
Vehicle ID: 464 00042/13, Configuration 0

Hopefully, I can avoid doing this again!

Bill

From: Rodgers, William  
Sent: Wednesday, January 25, 2012 1:15 PM  
To: 'Jim Snyder'  
Cc: Giles, Michael  
Subject: VW Group - Decision Information

Hello Jim,  
I submitted the T2B5/ULEV VW CC tests and Decision Information we discussed this morning regarding a test data resubmission as 2013 model year, intended to replace the 2008 model year data you previously waived. The new Vehicle ID is: VW462 8-0062/13\_Configuration 0. Please waive the confirmatory testing so I can enter the manufacturer confirmatory HWY test we did.

There will be another similar resubmission coming for the corresponding T2B3/SULEV version of this car.

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office  
3800 Hamlin Rd.  
Auburn Hills, MI 48436  
United States  
office (248) 754-4219  
fax (248) 754-4207  
william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Wed 2/1/2012 9:35:14 PM  
**Subject:** RE: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L  
CBI DVWXR0110PHE RFA ORV R02.PDF

Hello Lynn,

As we discussed, please find attached a revised submission for our Non-Integrated ORVR for the MY 2013 Jetta Hybrid. I hope this revision answers your questions.

This revised document was submitted to VERIFY today.

Please contact me if you have further questions.

Regards,  
Mike

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Friday, January 13, 2012 3:55 PM  
To: Giles, Michael  
Subject: Re: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Dear Mr. Giles,

Thank you for the ORVR application below. I have a few questions before I forward the application to my team members: there are several references to Bugatti in the application. Is this family identical to a Bugatti family? Items 3 and 4 specifically mention Bugatti. What is the connection with Bugatti and this VW evap family?

Thanks for your answers.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 01/09/2012 08:13 AM  
Subject: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Lynn,

I was asked by my colleague (Bob Hart) to send you copies of our ORVR submissions. The attachment was recently submitted to Jim Snyder through Verify.

Please call me if you have any questions about this.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

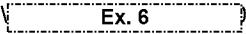
[attachment "CBI\_DVWXR0110PHE\_RFA\_ORV\_R00.PDF" deleted by Lynn  
Sohacki/AA/USEPA/US]

**To:** Bernd Liebner/AA/USEPA/US@EPA;Lynn Sohacki/AA/USEPA/US@EPA[]; ynn  
Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Thur 2/2/2012 3:14:18 PM  
**Subject:** picture of wrong test group  
IMG\_9004.jpg  
sebastian.berenz@vw.com

Hello Lynn,

Hello Bernd,

Attached you will find the picture we took of the wrong emission label on the Audi A4 of EPA Surveillance  
Program 9AD XV03.23LC - 3.2l AVS MY 2009.

· \_R104RXX-0049\_MY2009\_Audi\_A4

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

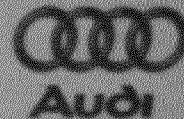
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

# AUDI AG



## VEHICLE EMISSION CONTROL INFORMATION

CONFORMS TO REGULATIONS: 2009 MY

U.S. EPA: T2B5 LDV

OBD: CA II FUEL: GASOLINE

CALIFORNIA: LEV II PC

OBD: CA II FUEL: GASOLINE

NO ADJUSTMENTS NEEDED. DFI/2TWC/2HO2S(2)

GROUP: 9ADXT03.23LC

EVAP: 9ADXR0140B8Q

06E 010 504 S



**To:** "Berenz, Sebastian" [Sebastian.Berenz@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Thur 2/2/2012 3:19:56 PM  
**Subject:** Re: picture of wrong test group  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Thanks for the picture, Sebastian. Bernd told me that Audi is already working on this issue. Please let me know the details once they have been determined so we can discuss them.


Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Berenz, Sebastian" <Sebastian.Berenz@vw.com>  
To: Bernd Liebner/AA/USEPA/US@EPA, Lynn Sohacki/AA/USEPA/US@EPA  
Date: 02/02/2012 10:14 AM  
Subject: picture of wrong test group

Hello Lynn,  
Hello Bernd,

Attached you will find the picture we took of the wrong emission label on the Audi A4 of EPA Surveillance Program 9AD XV03.23LC - 3.2l AVS MY 2009.

·  \_R104RXX-0049\_MY2009\_Audi\_A4

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!  
[attachment "IMG\_9004.jpg" deleted by Lynn Sohacki/AA/USEPA/US]

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Thur 2/2/2012 9:40:35 PM  
**Subject:** Accepted: Meeting with Audi to discuss mislabeling issue  
[winmail.dat](#)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Fri 2/3/2012 3:43:05 PM  
**Subject:** VW Group Decision Infomration - Lamborghini

Hello Jim,

Today we submitted Decision requests for vehicles within 2 Lamborghini test groups. A summary of the veh/config. submissions is listed below. Please advise of confirmatory decisions at your earliest convenience or call me if you have questions.

Best regards,

Mike

Test Group Configuration	Test Group Description Description	Vehicle ID /
DNLXV06.5L83 0	Aventador Roadster / Coupe with start / stop technology Aventador Roadster with start / stop	LB83-DSSCD /
DNLXV06.5L83 1	Aventador Roadster / Coupe with start / stop technology Aventador Coupe with start / stop	LB83-DSSCD /

Test Group Configuration	Test Group Description Description	Vehicle ID /
DNLXV06.55LX 0	Aventador Roadster / Coupe with FFV Technology Aventador Roadster with FFV (gasoline tests)	LB83-DFFV/
DNLXV06.55LX 2	Aventador Roadster / Coupe with FFV Technology Aventador Roadster with FFV (ethanol tests)	LB83-DFFV/
DNLXV06.55LX 1	Aventador Roadster / Coupe with FFV Technology Aventador Coupe (FEDV) with FFV (gasoline tests)	LB83-DFFV/
DNLXV06.55LX 3	Aventador Roadster / Coupe with FFV Technology Aventador Coupe (FEDV) with FFV (ethanol tests)	LB83-DFFV/

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Mon 2/6/2012 1:06:22 PM  
**Subject:** VW Group - Lamborghini Start-Stop Questions  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

Mike Giles is out today so I am forwarding this information in reply to your questions regarding the Lamborghini Aventador with Start&Stop technology, test group DNLXV06.5L83.

We have confirmed the following:

- 1) Production vehicles will have a button to deactivate/activate the Start&Stop operation on the driver command.
- 2) The strategy is DEFAULT ON (i.e. every time you start the engine, the Start&Stop system is enabled, independently on the status at key off).
- 3) The test vehicle is a pre-production unit and does not have the button installed, it is instead programmed to remain in Start&Stop ON mode. This is based on the expectation that tests are to be performed in that mode. If you chose to confirm this vehicle, please let us know if it is vital that a driver activated switch be installed in the test vehicle?

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** christoph.kohnen@vw.com[]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com[];  
eonard.kata@vw.com[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Mon 2/6/2012 5:58:57 PM  
**Subject:** Re: SUBJECT: Evaporative durability aging fuel for gasoline vehicles  
<http://www.epa.gov/otaq/regs/fuels/additive/e15/>

Christoph,

Please let me know how you are coming on my Evap durability questions. If, possible, I could use your answers in the next two weeks.

Thanks

Dave

---

**From:** David Good/AA/USEPA/US  
**To:** christoph.kohnen@vw.com  
**Cc:** leonard.kata@vw.com, Jim Snyder/AA/USEPA/US@EPA  
**Date:** 12/16/2011 05:14 PM  
**Subject:** SUBJECT: Evaporative durability aging fuel for gasoline vehicles

Dr. Kohnen,

Background: As you know, for evaporative durability programs, the provisions of 40 CFR 86.1824-08, require that the service accumulation fuel "contains ethanol in, at least, the highest concentration permissible in gasoline under federal law and that is commercially available in any state in the United States. Unless otherwise approved by the Administrator, the manufacturer must determine the appropriate ethanol concentration by selecting the highest legal concentration commercially available during the calendar year before the one in which the manufacturer begins its mileage accumulation." This requirement applies mostly to whole vehicle evaporative durability programs. For evaporative bench aging programs, aging procedures are required to be "designed using good engineering judgment, to evaluate the emission deterioration of evaporative control systems" including any deterioration caused by the effects of in-use fuels (including ethanol content) on the evaporative system; ref. 40 CFR 86.1824-08(d) and (e).

Status of E15 in-use fuel: As of November 15, 2011, E15 has been approved by EPA, but has not yet been registered with EPA (and therefore was not yet legal for distribution or for sale as a transportation fuel at that time). See <http://www.epa.gov/otaq/regs/fuels/additive/e15/>.

Manufacturer's evaporative durability programs: I'm thinking that most manufacturers will be proactive regarding the ethanol content of their evaporative service accumulation/bench aging fuel. For example, I'm thinking that some manufacturers may have already have begun using E15 (or higher) evaporative durability fuel or will soon begin using it, especially for new evaporative families which are expected to be carried over for several years. [Note: I'm referring to the evaporative service accumulation/bench aging fuel only, not the evaporative test fuel.]

Questions: When you get a chance, please email us the following information:

1. Please describe what type of evaporative durability program(s) you are using for 2013 evaporative families, e.g. whole vehicle, bench aging, or both. If both, please provide the approximate



percentage of each.

2. Please describe your plans to phase in the use of E15 (or higher) for evaporative durability programs. If possible, please provide the ethanol content you intend to use for 2013, 2014 and 2015 model year evaporative durability programs.

For example, your response could indicate that “For the 2013 model year we will use bench aging evaporative durability programs, only. For the 2013 model year, we expect to have 5 evaporative/refueling families, of which 4 are carryover and will simulate the evaporative durability effects of E10 and one will simulate the evaporative durability effects of E15” with similar statements for 2014 and 2015 model year.

Thanks

**To:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]; Giles, Michael" [michael.giles@vw.com]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 2/6/2012 11:32:28 PM  
**Subject:** Re: VW Group - Lamborghini Start-Stop Questions  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

**Ex. 6**

call Steve Healy if any questions. x4121

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Jim Snyder/AA/USEPA/US  
**To:** "Rodgers, William" <William.Rodgers@vw.com>  
**Cc:** "Giles, Michael" <michael.giles@vw.com>  
**Date:** 02/06/2012 06:27 PM  
**Subject:** Re: VW Group - Lamborghini Start-Stop Questions

Since the default is enabled, it resets to enabled, and its a low volume Lamborghini, I don't see a need to test with it disabled. If this was a more typical volume vehicle I would first require more info on the enablement parameters and that you to bring a sample vehicle for us to evaluate (like the Audis).

I would still like a list from them of the parameters and settings that enable/disable the feature.

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[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

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**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** "Giles, Michael" <michael.giles@vw.com>  
**Date:** 02/06/2012 08:52 AM  
**Subject:** VW Group - Lamborghini Start-Stop Questions

Hello Jim,

**Ex. 6**

I am forwarding this information in reply to your questions regarding the Lamborghini Aventador with Start&Stop technology, test group DNLXV06.5L83.

We have confirmed the following:

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Regards,

Bill Rodgers  
Emissions Certification Engineer

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fax (248) 754-4207  
william.rodgers@vw.com

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**To:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]; Giles, Michael" [michael.giles@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 2/6/2012 11:32:28 PM  
**Subject:** Re: VW Group - Lamborghini Start-Stop Questions  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

I will be gone the rest of the week so call Steve Healy if any questions. x4121

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Light-Duty Vehicle Group  
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(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: Jim Snyder/AA/USEPA/US  
To: "Rodgers, William" <William.Rodgers@vw.com>  
Cc: "Giles, Michael" <michael.giles@vw.com>  
Date: 02/06/2012 06:27 PM  
Subject: Re: VW Group - Lamborghini Start-Stop Questions

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From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>  
Date: 02/06/2012 08:52 AM  
Subject: VW Group - Lamborghini Start-Stop Questions

Hello Jim,  
Mike Giles is out today so I am forwarding this information in reply to your questions regarding the

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Regards,

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Emissions Certification Engineer

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office (248) 754-4219  
fax (248) 754-4207  
william.rodgers@vw.com

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**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Wed 2/8/2012 3:36:21 PM  
**Subject:** VW Group - 2.5L Certificate Requests  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I've submitted 8 Certificate Requests covering the (4) 2013 Volkswagen 2.5L test groups listed below. There is no rush on these considering the market introduction date is June.

These requests are all carryovers based on 2012 test groups with no new tests or technical changes. The only difference from 2012 is that we chose to separate them into 4 (transmission specific) test groups for 2013 , i.e., 2 for automatic models and 2 for manual models. This was done for (MSAT) Cold NMHC Standard purposes. See below:

2012 Test Grp

2013 Test Grp

2013 Test Group Standard Cold NMHC

DVWXV02.5A59

Auto.

0.40

CVWXV02.5259

DVWXV02.5M59

Man.

0.30

DVWXV02.5U3A

Auto.

0.40

CVWXV02.5U35

DVWXV02.5U3M

Man.

0.30

Regards,

Bill Rodgers

Emissions Certification Engineer

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[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

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**To:** Jim Snyder/AA/USEPA/US@EPA;"healy.steve@epamail.epa.gov"  
[healy.steve@epamail.epa.gov]; healy.steve@epamail.epa.gov"  
[healy.steve@epamail.epa.gov]  
**From:** "Giles, Michael"  
**Sent:** Thur 2/9/2012 1:13:04 PM  
**Subject:** RE: VW Group - Lamborghini Start-Stop Questions  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim / Steve,

Regarding the confirmatory test for the Lamborghini Aventador (vehicle /Config. LB83-DSSCD / 0), the original availability date supplied in the D.I. request was March 14th. However, we were just informed that this date would need to be pushed back approximately 2 weeks.

I should have a firm date soon but wanted to let you know in case scheduling was underway. If it makes sense at this stage to correct this date in the DI , let me know.

Thanks,

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, February 06, 2012 6:32 PM  
To: Jim Snyder  
Cc: Rodgers, William; Giles, Michael  
Subject: Re: VW Group - Lamborghini Start-Stop Questions

I will be gone the rest of the week so call Steve Healy if any questions. x4121

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: Jim Snyder/AA/USEPA/US



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Cc: "Giles, Michael" <michael.giles@vw.com>  
Date: 02/06/2012 06:27 PM  
Subject: Re: VW Group - Lamborghini Start-Stop Questions

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snyder.jim@epa.gov

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>  
Date: 02/06/2012 08:52 AM  
Subject: VW Group - Lamborghini Start-Stop Questions

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Regards,

Bill Rodgers

Emissions Certification Engineer

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william.rodgers@vw.com

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**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Rodgers, William"  
[William.Rodgers@vw.com]  
**From:** "Hart, Robert (VWoA)"  
**Sent:** Mon 2/13/2012 6:28:01 PM  
**Subject:** VW Group: Request for Approval for an Alternate Cooling Fan for Emission Testing for  
the MY 2013 Lamborghini Aventador  
CBI\_DNLXV06.5L83\_RFA\_STP\_R00.PDF  
robert.hart@vw.com

Hello Jim,

The Verify System is down, so if necessary, I will submit this through it when the system is working again.

The attachment is a request for approval of an alternate cooling fan for emission testing of the MY 2013  
Lamborghini Aventador. Please see the attachment.

Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207


E-mail: [robert.hart@vw.com](mailto:robert.hart@vw.com)

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Mon 2/13/2012 9:17:38 PM  
**Subject:** Test data for in-use vehicle R104-0049  
[R104RXX-0049.pdf](#)

Hi, Sebastian.

The data for the above vehicle is attached. Please give me a call if you have any questions.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

NVFEL Laboratory Test Data						CVS	
Final Laboratory Test Results							
Test Number: 2012-0103-002				Vehicle ID: R104RXX-0049			
	<b>Test Information</b>						
	Test Date: 2/9/2012			MFR Name: AUDI			
	Key Start / Hot Soak: 08:41:13 / 09:50			MFR Codes: 640      ADX			
	Fuel Container ID: F00023			Config #: 00			
	Fuel Type: 61 Tier 2 Cert Test Fuel			Transmission: AUTO			
	Test Procedure: 21 Fed Fuel 2-day Exhaust (CAN LOAD)(ftp)			Shift Schedule: A09980005			
Calculation Method: Gasoline				Beginning Odometer: 029777.0 MI			
Pretest Remarks:				Drive Schedule: ftp3bag			
				Soak Period: 19.5 hours			
<hr/>							
<b>Bag Data</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
<b>Phase 1</b>		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample		18.414	48.352	2.684	1.061	3.465	
Ambient		2.438	0.000	0.010	0.044	1.993	
Net Concentration		16.169	48.352	2.675	1.020	1.631	14.237
Remarks:							
<b>Phase 2</b>							
Sample		2.394	1.528	0.043	0.678	1.898	
Ambient		2.456	0.000	0.008	0.044	1.984	
Net Concentration		0.062	1.528	0.035	0.637	0.014	0.045
Remarks:							
<b>Phase 3</b>							
Sample		4.213	17.524	0.179	0.912	2.247	
Ambient		2.446	0.000	0.008	0.044	1.973	
Net Concentration		1.933	17.524	0.172	0.871	0.408	1.450
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<hr/>							
<b>Results</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
Phase 1		0.209	1.261	0.103	418.2	0.024	0.184
Phase 2		0.001	0.064	0.002	416.6	0.000	0.001
Phase 3		0.025	0.457	0.007	357.2	0.006	0.019
Weighted		0.05089	0.42035	0.02443	400.589	0.00691	0.04381
<b>Fuel Economy</b>		<u>Gasoline MPG</u>	<u>Dyno Settings</u>				<u>Dyno #:</u> D329 - AWD
Phase 1		21.16					Inertia: 4250
Phase 2		21.37					EPA Set Co A: -0.34
Phase 3		24.87					EPA Set Co B: 0.1024
							EPA Set Co C: 0.02006
Weighted		22.16					Emiss-Bench: Mexa 7200sle

v101208 - d329

EPAVDAEm120209083322

Page 1 of 2

Print Time 13-Feb-2012 06:05


# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results


Test Number: 2012-0103-002

Vehicle ID: R104RXX-0049

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
 Phase 1	0.751	4.532	0.372	1502.7	0.088	0.661	1.185
Phase 2	0.005	0.245	0.008	1604.0	0.001	0.004	
Phase 3	0.090	1.639	0.024	1279.7	0.022	0.067	

## Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.26	29.26	29.25	
Avg Cell Temp (degF)	74.82	75.18	75.69	
Dew Point (degF)	48.64	48.69	48.66	
Specific Humidity (grains/lbm)	52.03	52.14	52.07	
NOx Corr Factor	0.9026	0.9030	0.9027	
CO2 Dilution Factor	12.554	19.743	14.664	
CFV Vmix (scf @68F)	2842.74	4862.09	2836.21	
CVS Flow Rate Avg (scfm)	336.35	335.47	335.51	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.10	869.60	507.20	
Distance (miles)	3.594	3.851	3.583	
Bag Analysis Time (secs)	879.1	1113.6	161.5	

NVFEL Laboratory Test Data						CVS		
Final Laboratory Test Results								
Test Number: 2012-0103-003				Vehicle ID: R104RXX-0049				
	Test Date: 2/9/2012		MFR Name: AUDI					
	Key Start: 09:52:17		MFR Codes: 640		ADX			
	Fuel Container ID: F00023		Config #: 00					
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO					
	Test Procedure: 03 HWFET (hwfetprep_hwfet)		Shift Schedule: A09980011					
	Calculation Method: Gasoline		Beginning Odometer: 029788.0 MI					
Pretest Remarks:				Drive Schedule: hwfet_hwfet				
<b>Bag Data</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample		3.533	15.407	0.262	1.158	2.059		
Ambient		2.442	0.000	0.010	0.044	1.960		
Net Concentration		1.303	15.407	0.254	1.117	0.269	0.984	
Remarks:								
<b>Phase 2</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Phase 3</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Phase 4</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Results</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1		0.009	0.210	0.005	239.7	0.002	0.007	37.176
<b>Fuel Economy</b>		<u>Gasoline MPG</u>			<u>Dyno Settings</u>		<u>Dyno #:</u> D329 - AWD	
Phase 1		37.09					Inertia: 4250	
							EPA Set Co A: -0.34	
							EPA Set Co B: 0.1024	
							EPA Set Co C: 0.02006	
							Emiss-Bench: Mexa 7200sle	
<div style="display: flex; justify-content: space-between; font-size: small;"> <span>v101208 - d329 EPAVDAEm120209093015</span> <span>Page 1 of 2</span> <span>Print Time 13-Feb-2012 06:06</span> </div>								



# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0103-003

Vehicle ID: R104RXX-0049

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.090	2.151	0.053	2451.6	0.022	0.068	1.185

### Test Conditions

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	29.25			
Avg Cell Temp (degF)	75.76			
Dew Point (degF)	48.73			
Specific Humidity (grains/lbm)	52.23			
NOx Corr Factor	0.9033			
CO2 Dilution Factor	11.554			
CFV Vmix (scf @68F)	4234.56			
CVS Flow Rate Avg (scfm)	332.12			
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	765.00			
Distance (miles)	10.227			
Bag Analysis Time (secs)	145.9			

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0103-004

Vehicle ID: R104RXX-0049

### Test Information



Test Date: 2/9/2012

Key Start: 10:32:39

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Test Fuel

Test Procedure: 90 US06 (us06warmup\_us06)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: AUDI

MFR Codes: 640 ADX

Config #: 00

Transmission: AUTO

Shift Schedule: A09980041

Beginning Odometer: 029809.0 MI

Drive Schedule: us06\_us06

### Bag Data

	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Phase 1						
Sample	3.803	41.038	0.965	1.137	2.041	
Ambient	2.424	0.000	0.016	0.045	1.946	
Net Concentration	1.585	41.038	0.950	1.095	0.261	1.276

Remarks:

### Phase 2

Sample  
Ambient  
Net Concentration

Remarks:

### Phase 3

Sample  
Ambient  
Net Concentration

Remarks:

### Phase 4

Sample  
Ambient  
Net Concentration

Remarks:

### Results

	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.018	0.955	0.033	400.5	0.003	0.015	22.199

### Fuel Economy

Gasoline MPG

Phase 1 22.15

### Dyno Settings

Dyno #: D329 - AWD

Inertia: 4250

EPA Set Co A: -0.34

EPA Set Co B: 0.1024

EPA Set Co C: 0.02006

Emiss-Bench: Mexa 7200sle

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0103-004

Vehicle ID: R104RXX-0049

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.146	7.635	0.262	3202.4	0.028	0.118	1.185



### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.24			
Avg Cell Temp (degF)	75.11			
Dew Point (degF)	48.48			
Specific Humidity (grains/lbm)	51.74			
NOx Corr Factor	0.9015			
CO2 Dilution Factor	11.742			
CFV Vmix (scf @68F)	5643.25			
CVS Flow Rate Avg (scfm)	563.10			
Fan Placement: USO6 Only - One Large Fan - Up - Front				
Phase Time (secs)	601.29			
Distance (miles)	7.996			
Bag Analysis Time (secs)	156.0			

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Mon 2/13/2012 9:45:29 PM  
**Subject:** RE: Test data for in-use vehicle R104-0049

Hello Lynn,

Thank you very much.

I checked the values and the test looks pretty good to me. It passed the federal and California standards.

Let me know if you have any questions.

Thank you very much.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Monday, February 13, 2012 4:18 PM  
To: Berenz, Sebastian  
Subject: Test data for in-use vehicle R104-0049

Hi, Sebastian.

The data for the above vehicle is attached. Please give me a call if you have any questions.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: R104RXX-0049.pdf)

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 2/14/2012 12:09:23 AM  
**Subject:** Re: VW Group - 2.5L Certificate Requests  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Thanks for the explanation Bill. I just got back today and I'm pretty buried so its good to know they are time critical.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
Date: 02/08/2012 10:36 AM  
Subject: VW Group - 2.5L Certificate Requests

Hello Jim,  
I've submitted 8 Certificate Requests covering the (4) 2013 Volkswagen 2.5L test groups listed below.  
There is no rush on these considering the market introduction date is June.

These requests are all carryovers based on 2012 test groups with no new tests or technical changes. The only difference from 2012 is that we chose to separate them into 4 (transmission specific) test groups for 2013, i.e., 2 for automatic models and 2 for manual models. This was done for (MSAT) Cold NMHC Standard purposes. See below:

2012 Test Grp	2013 Test Grp	2013 Test Group Standard Cold NMHC
	DVWXV02.5A59 Auto.	0.40
CVWXV02.5259	DVWXV02.5M59 Man.	0.30
	DVWXV02.5U3A Auto.	0.40
CVWXV02.5U35	DVWXV02.5U3M Man.	0.30

Regards,

Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.  
Auburn Hills, MI 48436  
United States  
office (248) 754-4219  
fax (248) 754-4207  
william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Hart, Robert (VWoA)"  
**Sent:** Tue 2/14/2012 12:24:42 PM  
**Subject:** RE: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[Robert.Hart@vw.com](mailto:Robert.Hart@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Hello Jim,

**Ex. 4 - CBI**

Best regards,

Bob Hart

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, February 13, 2012 7:00 PM  
To: Hart, Robert (VWoA)  
Subject: Re: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

Bob, I'm not sure I understand the graphic.

**Ex. 4 - CBI**

**Ex. 4 - CBI**

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency



(734) 214-4946  
snyder.jim@epa.gov

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 02/13/2012 01:27 PM  
Subject: VW Group: Request for Approval for an Alternate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

Hello Jim,

The Verify System is down, so if necessary, I will submit this through it when the system is working again.

The attachment is a request for approval of an alternate cooling fan for emission testing of the MY 2013 Lamborghini Aventador. Please see the attachment.

Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com

[attachment "CBI\_DNLXV06.5L83\_RFA\_STP\_R00.PDF" deleted by Jim Snyder/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Tue 2/14/2012 1:23:31 PM  
**Subject:** VW Group - Decision Informations submitted - 12MY Beetle Conv Manual  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hi Jim,

I submitted two Decision Information's today to support running changes which added new models to 2012 test groups, CVWXV02.03PA and CADXJ02.03UA. Both represent Beetle Convertible 2.0L TFSI Manual trans. FEDV's already certified with no new technology.

Thanks and welcome back,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Tue 2/14/2012 9:16:51 PM  
**Subject:** VW Group - Decision Informations submitted - 12MY Beetle Conv AUTOMATIC  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hi Jim,

I submitted Two more Decision Information's today to represent the Automatic transmission versions of those mentioned below.

Regards,

Bill

From: Rodgers, William  
Sent: Tuesday, February 14, 2012 8:24 AM  
To: 'Jim Snyder'  
Subject: VW Group - Decision Informations submitted - 12MY Beetle Conv Manual

Hi Jim,

I submitted two Decision Information's today to support running changes which added new models to 2012 test groups, CVWXV02.03PA and CADXJ02.03UA. Both represent Beetle Convertible 2.0L TFSI Manual trans. FEDV's already certified with no new technology.

Thanks and welcome back,

Bill Rodgers

Emissions Certification Engineer

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fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Wed 2/15/2012 1:29:33 PM  
**Subject:** VW Group - Test waivers  
[image001.gif](#)

Hi Jim,

I received test waivers last night for 3 of the 4 Beetle Convertible Decision Information's I submitted. I was wondering if the (4th submittal) FEDV selected below was a random pick?

It happens to be a 2009 VW Eos test vehicle that's been around a while that we recently tested to represent a 2012 Beetle Convertible. Please let me know if you want to waive it.

FYI - We will also be sending you Decision Information for two start/stop vehicles this week, 1- Audi V8 and 1-Bentley V8.

Thanks,

Bill

**From:** Verify Administrator  
**Subject:** Vehicle selected for Test VW465 790007/09, Supplemental Information needed  
**Date:** Tue 2/14/2012 6:57 PM

Your recent submission has been selected by the EPA for Confirmatory Testing for the following vehicle:  
Manufacturer: ADX Vehicle ID: VW465 790007/09 Vehicle Configuration: 3 Please submit your supplemental information as soon as possible so that the EPA can schedule a test date. Below are the specific tests that will be run: 21 - Federal fuel 2-day exhaust (w/can load) 61 - Tier 2 Cert Gasoline 3 - HWFE 61 - Tier 2 Cert Gasoline 90 - US06 61 - Tier 2 Cert Gasoline

Vehicle ID: VW465 790007/09

Vehicle Configuration #: 3

Test Group Name: CADXJ02.03UA

Transaction Identifier: \_8714bb1c-2873-4196-87aa-44db24014319

**To:** Verify Help Desk [verifyhelp@csc.com]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Wed 2/15/2012 2:38:55 PM  
**Subject:** Verify email notifications  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello,

It appears that none of the Verify users here at Volkswagen are receiving email notifications for (at least) Confirmatory Test Waivers. Please investigate.

Thanks,

Bill Rodgers

Emissions Certification Engineer

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Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** Ex. 6  
**Sent:** Wed 2/15/2012 4:42:39 PM  
**Subject:** Re: Verify email notifications (HLP-2310)

Mr. Rodgers,

Verify help desk ticket HLP-2310 was opened for your request. Do you happen to know when the confirmatory tests were waived?

Ex. 6

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Rodgers,  
William"  
<William.Rodgers@vw.com> To  
Verify Help Desk@CSC  
cc  
02/15/2012 09:38 Jim Snyder  
AM <Snyder.Jim@epamail.epa.gov>  
Subject  
Verify email notifications

Hello,  
It appears that none of the Verify users here at Volkswagen are receiving email notifications for (at least) Confirmatory Test Waivers. Please investigate.



Thanks,

Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office  
3800 Hamlin Rd.  
Auburn Hills, MI 48436  
United States  
office (248) 754-4219  
fax (248) 754-4207  
william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to  
the ENVIRONMENT!

**To:** "Rodgers, William" [William.Rodgers@vw.com]; im Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Wed 2/15/2012 6:06:03 PM  
**Subject:** RE: VW Group - Test waivers  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)  
[image001.gif](#)

Jim,

I need to correct my statement below regarding upcoming data for start-stop vehicles. The test data we will be submitting today are is not for Start-stop equipped vehicles.

Sorry for the confusion.

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Rodgers, William  
Sent: Wednesday, February 15, 2012 8:30 AM  
To: 'Jim Snyder'  
Cc: Giles, Michael  
Subject: VW Group - Test waivers

Hi Jim,

I received test waivers last night for 3 of the 4 Beetle Convertible Decision Information's I submitted. I was wondering if the (4th submittal) FEDV selected below was a random pick?

It happens to be a 2009 VW Eos test vehicle that's been around a while that we recently tested to represent a 2012 Beetle Convertible. Please let me know if you want to waive it.

FYI - We will also be sending you Decision Information for two start/stop vehicles this week, 1- Audi V8 and 1- Bentley V8.

Thanks,

Bill

From:

Verify Administrator

Subject:

Vehicle selected for Test VW465 790007/09, Supplemental Information needed

Date:

Tue 2/14/2012 6:57 PM

Your recent submission has been selected by the EPA for Confirmatory Testing for the following vehicle:  
Manufacturer: ADX Vehicle ID: VW465 790007/09 Vehicle Configuration: 3 Please submit your supplemental information as soon as possible so that the EPA can schedule a test date. Below are the specific tests that will be run: 21 - Federal fuel 2-day exhaust (w/can load) 61 - Tier 2 Cert Gasoline 3 - HWFE 61 - Tier 2 Cert Gasoline 90 - US06 61 - Tier 2 Cert Gasoline

Vehicle ID: VW465 790007/09

Vehicle Configuration #: 3

Test Group Name: CADXJ02.03UA

Transaction Identifier: \_8714bb1c-2873-4196-87aa-44db24014319

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Hart, Robert (VWoA)"  
[Robert.Hart@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Thur 2/16/2012 4:07:13 PM  
**Subject:** VW Group - Confirmatory Testing ADX Vehicle ID: VW465 790007/09 Vehicle  
Configuration: 3  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I submitted the Supplemental Information for the following vehicle.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

Your recent submission has been selected by the EPA for Confirmatory Testing for the following vehicle:

Manufacturer: ADX Vehicle ID: VW465 790007/09 Vehicle Configuration: 3 Please submit your supplemental information as soon as possible so that the EPA can schedule a test date. Below are the specific tests that will be run: 21 - Federal fuel 2-day exhaust (w/can load) 61 - Tier 2 Cert Gasoline 3 - HWFE 61 - Tier 2 Cert Gasoline 90 - US06 61 - Tier 2 Cert Gasoline

Vehicle ID: VW465 790007/09

Vehicle Configuration #: 3

Test Group Name: CADXJ02.03UA

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Thur 2/16/2012 7:34:12 PM  
**Subject:** VW Group - Bentley 4.0L Test Decision Information  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

As mentioned today, I have submitted the Decision Information for the following Bentley Continental V8 bi-turbo vehicles in test group DAD XV04.03UJ.

D3UJ-BY62  
0 EDV

D3UJ-BY62  
1 FEDV

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Thur 2/16/2012 8:01:56 PM  
**Subject:** VW Group - Decision Information

Hello Jim,

I uploaded a D.I. for the Audi S8 4.0L bi-turbo, in test group DAD XV04.03UJ.

The Vehicle ID is: D3UJ-S8Q configuration 0.

Note, this vehicle is in the same test group as the Bentley Continental Bill recently sent. It has cylinder deactivation , and does not have start/stop.

Please advise if you have any questions.

Regards

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA;"Kohnen, Christoph (VWGoA)"  
[christoph.kohnen@vw.com]; Kohnen, Christoph (VWGoA)"  
[christoph.kohnen@vw.com]  
**From:** "Kata, Leonard"  
**Sent:** Thur 2/16/2012 11:09:20 PM  
**Subject:** RE: SUBJECT: Evaporative durability aging fuel for gasoline vehicles

Hello Dave:

Dr. Kohnen asked me to look into your questions regarding evaporative emission durability aging for gasoline engines. I have contacted the factories. The response that I received is provided on behalf of the entire Volkswagen Group. I have repeated your questions for clarity.

1. Please describe what type of evaporative durability program(s) you are using for 2013 evaporative families, e.g. whole vehicle, bench aging, or both. If both, please provide the approximate percentage of each.

Response: The Volkswagen Group uses both, bench aging and whole vehicle durability procedure. 40 percent of the ORVR families are using whole-vehicle aging plus bench-aging and 60 percent have been bench-aged only.

2. Please describe your plans to phase in the use of E15 (or higher) for evaporative durability programs. If possible, please provide the ethanol content you intend to use for 2013, 2014 and 2015 model year evaporative durability programs.

Response: For model year 2013, Volkswagen will continue using a combination of bench-aging only and whole vehicle durability procedures plus bench testing. Volkswagen, as a group, is using commercial fuel for the aging procedures, which contains E10. Certification test fuels for the SHED and refueling test are according the current fuel specification regulations (E0). Volkswagen will carry-over 23 evaporative emission/ORVR families to model year 2013 and certify two new evaporative emission/ORVR families for model year 2013. New evaporative emission/ORVR families to be certified in 2014 and subsequent model years will continue to use commercial fuel according to the field specification in effect (e.g., E15). For the carry-over families in model year 2013 and for later model years, Volkswagen conducted an engineering evaluation to determine the effect on aging if an ethanol content higher than E10 is used for the aging procedures, to cover ethanol content up to E15 in the market. The engineering results show that ethanol has no impact on the gradient of aging over time and therefore has no impact on the deterioration factors.

Please let me know if you have any further questions.

Best regards,

Len

---

Leonard W. Kata  
Manager, Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

-----Original Message-----

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Monday, February 06, 2012 12:59 PM  
To: Kohnen, Christoph (VWGoA)  
Cc: Jim Snyder; Kata, Leonard  
Subject: Re: SUBJECT: Evaporative durability aging fuel for gasoline vehicles

Christoph,

Please let me know how you are coming on my Evap durability questions.  
If, possible, I could use your answers in the next two weeks.

Thanks

Dave

---

From: David Good/AA/USEPA/US  
To: christoph.kohnen@vw.com  
Cc: leonard.kata@vw.com, Jim Snyder/AA/USEPA/US@EPA  
Date: 12/16/2011 05:14 PM  
Subject: SUBJECT: Evaporative durability aging fuel for gasoline vehicles

Dr. Kohnen,

Background: As you know, for evaporative durability programs, the provisions of 40 CFR 86.1824-08, require that the service accumulation fuel "contains ethanol in, at least, the highest concentration permissible in gasoline under federal law and that is commercially available in any state in the United States. Unless otherwise approved by the Administrator, the manufacturer must determine the appropriate ethanol concentration by selecting the highest legal concentration commercially available during the calendar year before the one in which the manufacturer begins its mileage accumulation." This requirement applies mostly to whole vehicle evaporative durability programs. For evaporative bench aging programs, aging procedures are required to be "designed using good engineering judgment, to evaluate the emission deterioration of evaporative control systems" including any deterioration caused by the effects of in-use fuels (including ethanol content) on the evaporative system; ref. 40 CFR 86.1824-08(d) and (e).

Status of E15 in-use fuel: As of November 15, 2011, E15 has been approved by EPA, but has not yet been registered with EPA (and therefore was not yet legal for distribution or for sale as a transportation fuel at that time). See <http://www.epa.gov/otaq/regs/fuels/additive/e15/>.

Manufacturer's evaporative durability programs: I'm thinking that most manufacturers will be proactive regarding the ethanol content of their evaporative service accumulation/bench aging fuel. For example, I'm thinking that some manufacturers may have already begun using E15 (or higher) evaporative durability fuel or will soon begin using it, especially for new evaporative families which are expected to be carried over for several years. [Note: I'm referring to the evaporative service accumulation/bench aging fuel only, not the evaporative test fuel.]

Questions: When you get a chance, please email us the following information:

1. Please describe what type of evaporative durability program(s) you are using for 2013 evaporative families, e.g. whole vehicle, bench aging, or both. If both, please provide the approximate percentage of each.
2. Please describe your plans to phase in the use of E15 (or higher) for evaporative durability programs. If possible, please provide the ethanol content you intend to use for 2013, 2014 and 2015 model year evaporative durability programs.

For example, your response could indicate that "For the 2013 model year we will use bench aging evaporative durability programs, only. For the 2013 model year, we expect to have 5 evaporative/refueling families, of which 4 are carryover and will simulate the evaporative durability effects of E10 and one will simulate the evaporative durability effects of E15" with similar statements for 2014 and 2015 model year.

Thanks

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Fri 2/17/2012 2:01:07 PM  
**Subject:** RE: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hi Lynn,

Just a quick follow up to check status of this and make sure you have what you need. If you have further questions please let me know.

Thanks,  
Mike

-----Original Message-----

From: Giles, Michael  
Sent: Wednesday, February 01, 2012 4:35 PM  
To: 'Lynn Sohacki'  
Subject: RE: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Lynn,

As we discussed, please find attached a revised submission for our Non-Integrated ORVR for the MY 2013 Jetta Hybrid. I hope this revision answers your questions.

This revised document was submitted to VERIFY today.

Please contact me if you have further questions.

Regards,  
Mike

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Friday, January 13, 2012 3:55 PM  
To: Giles, Michael  
Subject: Re: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Dear Mr. Giles,

Thank you for the ORVR application below. I have a few questions before I forward the application to my team members: there are several references to Bugatti in the application. Is this family identical to a Bugatti family? Items 3 and 4 specifically mention Bugatti. What is the connection with Bugatti and this VW evap family?

Thanks for your answers.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851

734-214-4869 (fax)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 01/09/2012 08:13 AM  
Subject: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Lynn,

I was asked by my colleague (Bob Hart) to send you copies of our ORVR submissions. The attachment was recently submitted to Jim Snyder through Verify.

Please call me if you have any questions about this.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

[attachment "CBI\_DVWXR0110PHE\_RFA\_ORV\_R00.PDF" deleted by Lynn Sohacki/AA/USEPA/US]

**To:** Joel Ball/AA/USEPA/US@EPA[]  
**Cc:** "Johnson, Stuart" [Stuart.Johnson@vw.com]  
**From:** "Berenz, Sebastian"  
**Sent:** Fri 2/17/2012 6:45:08 PM  
**Subject:** RE: Volkswagen and Audi IUVP status  
[mime.htm](#)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Mr. Ball,

Like we recently discussed, I submitted the last vehicle today.

- MY2010 Low Mileage
- Test Group AVWXT03.6U76
- VIN: V Ex. 6

Now MY2006 and MY2010 is finished and all results submitted. We are working now on MY2007 and MY2011.

Thank you very much for opening up the system for us again.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America



Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Berenz, Sebastian  
Sent: Wednesday, February 15, 2012 2:56 PM  
To: Joel Ball (ball.joel@epa.gov)  
Cc: 'Lynn Sohacki'  
Subject: Volkswagen and Audi IUVP status

Hello Mr. Ball,

I just wanted to inform you about Volkswagen's and Audi's IUVP program and where we stand so far.

IUVP

- MY2006 – High Mileage Program
- 10 EVAP Families Tested
- 13 Test Groups Tested
- 6ADXV01.8342 – Audi A4 Cabriolet, 1.8L Turbo (170hp), InT2 – Bin8  
5 vehicles submitted (1 High Altitude)
- 6ADXV04.2345 – Audi S4/S4 Avant/S4 Cabriolet/Audi A6 quattro/VW Phaeton/Audi A8/A8L, 4.2L V8 (335hp),  
LEV I – LEV/InT2 – Bin 9  
5 vehicles submitted (1 High Altitude)
- 6ADXV02.0366 – Audi A3/VW GTI (A5)/VW Jetta (A5)/VW Passat / Passat Wagon (B6), 2.0L TFSI (200hp), LEV  
II – ULEV/Tier 2 – Bin 5  
6 vehicles submitted (1 High Altitude)
- 6ADXV02.0352 – Audi A4 / A4 quattro (B7), 2.0L TFSI (200hp), LEV II – ULEV/Tier 2 – Bin5

5 vehicles submitted (1 High Altitude)

- 6AD XV03.1364 – Audi A6 quattro/Audi A4 / A4 quattro (B7), 3.1L FSI (255hp), LEV I – LEV/InT2 – Bin 9  
5 vehicles submitted (1 High Altitude)
- 6AD XV03.1374 – Audi A6 quattro/Audi A4 / A4 quattro (B7), 3.1L FSI (255hp), LEV II – LEV/Tier 2 – Bin 5  
5 vehicles submitted (1 High Altitude)
- 6VW XT03.2275 – VW Touareg, 3.2L VR6 (240hp), LEV II – LEV/Tier 2 – Bin 5  
5 vehicles submitted (1 High Altitude)
- 6VW XV01.9236 – VW Golf (A4)/VW Jetta Wagon (A4)/VW New Beetle, 1.9L TDI (100hp), InT2 – Bin 10  
5 vehicles submitted (1 High Altitude)
- 6VW XV01.9238 – VW Jetta (A5), 1.9L TDI (100hp), InT2 – Bin 10  
5 vehicles submitted (1 High Altitude)
- 6VW XV02.5253 – VW New Beetle/New Beetle Convertible/VW Rabbit (A5)/VW Jetta (A6), 2.5L (150hp), LEV II – ULEV/Tier 2 – Bin 5  
5 vehicles submitted (1 High Altitude)
- 6VW XV02.5257 – VW New Beetle/New Beetle Convertible/VW Rabbit (A5)/VW Jetta (A5), 2.5L (150hp), LEV II – SULEV/Tier 2 – Bin 2  
5 vehicles submitted (1 High Altitude)
- 6VW XV03.6246 – VW Passat/Passat Wagon (B6), 3.6L VR6 FSI (280hp), LEV II – LEV/Tier 2 – Bin 5  
5 vehicles submitted (1 High Altitude)
- 6VW XV02.0223 – VW Golf (A4), 2.0L (115hp), Tier 2 – Bin 5  
5 vehicles submitted (1 High Altitude)
- Status: Testing finished, all vehicles submitted!
- MY2010 – Low Mileage Program
- 10 EVAP Families Tested
- 13 Test Groups Tested
- AAD XV02.03UA – Audi A3/A3 quat./VW Tiguan/VW GTI/Audi TT quat./TT Roadster quat./TTS Coupe/VW Jetta/VW Passat CC, 2.0L TFSI (265hp), LEV II – ULEV/Tier 2 – Bin 5  
2 vehicles submitted
- AAD XV02.03UB – Audi A4 quattro/A4 Avant quattro/A4 Cabriolet quattro/A4 CVT/A4 Cabriolet CVT/Audi A5 quattro, 2.0L TFSI – AVS (211hp), LEV II – ULEV/Tier 2 – Bin 5  
2 vehicles submitted
- AAD XJ03.23UC – Audi A4 quattro/A4 Cabriolet Quattro/Audi A5 quattro/Audi Q5/Audi A6 CVT, 3.2L FSI – AVS (265hp), LEV II – ULEV/Tier 2 – Bin 5  
2 vehicles submitted
- AAD XV02.03PA – Audi A3/VW Jetta/Jetta sportwagen/VW GTI, 2.0L TFSI (200hp), LEV II – SULEV (PZEV)/Tier 2 – Bin 3  
2 vehicles submitted

- AADXV03.03UF – Audi A6 quattro/A6 Avant Quattro/Audi S4/Audi S5 Cabriolet, 3.0L TFSI (300hp), LEV II – ULEV/Tier 2 – Bin 5  
2 vehicles submitted
- AVWXV02.0U5N – VW Jetta/Jetta Sportwagen/VW Golf (A6)/Audi A3, 2.0L TDI CR (140hp), LEV II – ULEV/Tier 2 – Bin 5  
3 vehicles submitted
- AVWXV02.5259 – VW Jetta (A5)/Jetta Sportwagen/VW Golf (A6), 2.5L (170hp), LEV II – SULEV(PZEV)/Tier 2 – Bin 5  
2 vehicles submitted
- AVWXV02.5U35 – VW Golf (A6)/VW Jetta (A5)/Jetta Sportwagen, 2.5L (170hp), Tier 2 – Bin 5  
2 vehicles submitted
- AVWXV02.03UA – VW Passat/Passat Wagon/Passat CC/VW Eos, 2.0L TFSI (200hp), Tier 2 – Bin5  
2 vehicles submitted
- AVWXV02.03PA – VW Passat/Passat Wagon/Passat CC, 2.0L TFSI (200hp), LEV II – SULEV (PZEV)/Tier 2 – Bin 3  
2 vehicles submitted
- AVWXV02.5257 – VW New Beetle/New Beetle Convertible, 2.5L (150hp), LEV II – SULEV(PZEV)/Tier 2 – Bin 3  
2 vehicles submitted
- AVWXV02.5253 – VW New Beetle/New Beetle Convertible, 2.5L (150hp), Tier 2 – Bin 5  
2 vehicles submitted
- AVWXT03.6U76 – Audi Q7/VW Touareg, 3.6L VR6 FSI (276hp/280hp), LEV II – ULEV/Tier 2 – Bin 5  
1 vehicle submitted
- Status: Testing finished. All vehicles submitted, except 1 from Test Group “AVWXT03.6U76”
- Problem MY 2010 Low Mileage Program
- MY2010 –Test Group AVWXT03.6U76 – We really had a hard time to procure the last vehicle with the mileage requirement. We finally got it in February 2012 and tested it also as an EVAP test vehicle. The Verify-System won't let me enter it, since it is already too late.
- How do you want me to proceed? Is there a way to open up Verify again?

Here is a just a quick status report on this year's IUVP program:

- MY2007 – High Mileage Program
- 9 EVAP Families to be tested

- 8 Test Groups to be tested
- 40% completed and submitted
  
- MY2011 – Low Mileage Program
- 9 EVAP Families to be tested
- 14 Test Groups to be tested
- 7% completed and submitted

Also we are involved in an EPA Surveillance program on test group 9ADXV03.23LC.

Please let me know how I should proceed on the one vehicle from MY2010 program which is already too late to enter it into Verify.

In case of any questions, please contact me.

Best regards.

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
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E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Fri 2/17/2012 7:35:23 PM  
**Subject:** RE: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hi, Michael.

I apologize that I haven't gotten back to you. I was out most of last week. I will review your submission by the end of next week.

Have a good weekend.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 02/17/2012 09:01 AM  
Subject: RE: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hi Lynn,

Just a quick follow up to check status of this and make sure you have what you need. If you have further questions please let me know.

Thanks,  
Mike

-----Original Message-----

From: Giles, Michael  
Sent: Wednesday, February 01, 2012 4:35 PM  
To: 'Lynn Sohacki'  
Subject: RE: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Lynn,

As we discussed, please find attached a revised submission for our Non-Integrated ORVR for the MY 2013 Jetta Hybrid. I hope this revision answers your questions.

This revised document was submitted to VERIFY today.

Please contact me if you have further questions.

Regards,  
Mike

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Friday, January 13, 2012 3:55 PM  
To: Giles, Michael  
Subject: Re: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Dear Mr. Giles,

Thank you for the ORVR application below. I have a few questions before I forward the application to my team members: there are several references to Bugatti in the application. Is this family identical to a Bugatti family? Items 3 and 4 specifically mention Bugatti. What is the connection with Bugatti and this VW evap family?

Thanks for your answers.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 01/09/2012 08:13 AM  
Subject: VW Group - ORVR Information MY2013 Jetta Hybrid 1.4L

Hello Lynn,

I was asked by my colleague (Bob Hart) to send you copies of our ORVR submissions. The attachment was recently submitted to Jim Snyder through Verify.

Please call me if you have any questions about this.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

[attachment "CBI\_DVWXR0110PHE\_RFA\_ORV\_R00.PDF" deleted by Lynn Sohacki/AA/USEPA/US]



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Rodgers, William"  
[William.Rodgers@vw.com]  
**From:** "Hart, Robert (VWoA)"  
**Sent:** Tue 2/21/2012 12:32:34 PM  
**Subject:** FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission  
Testing for the MY 2013 Lamborghini Aventador  
[CBI\\_DNLXV06.5L83\\_RFA\\_STP\\_R00.PDF](#)  
[Lamborghini Aventador Fan Placement.pdf](#)  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Hello Jim,

**Ex. 4 - CBI**

Regards

A.Baraldi

Please let me know what, if anything, should be submitted through the Verify System.

Best regards,

Bob Hart

From: Hart, Robert (VWoA)  
Sent: Monday, February 13, 2012 1:28 PM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov)

Cc: Giles, Michael; Rodgers, William

Subject: VW Group: Request for Approval for an Alternate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

Hello Jim,

The Verify System is down, so if necessary, I will submit this through it when the system is working again.

The attachment is a request for approval of an alternate cooling fan for emission testing of the MY 2013 Lamborghini Aventador. Please see the attachment.

Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com



# VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder  
Compliance and Innovative Strategies Division  
Office of Mobile Sources  
U. S. Environmental Protection Agency  
2000 Traverwood Drive  
Ann Arbor, MI 48105

Leonard W. Kata Name  
Manager Title  
EEO Department  
248-754-4204 Phone  
248-754-4207 Fax  
leonard.kata@vw.com E-Mail

February 13, 2012 Date

Subject: Approval Request for Alternate Cooling Fan Placement for Emissions  
Testing for the MY 2013 Lamborghini Aventador

Dear Mr. Snyder,

We submit, on behalf of Automobili Lamborghini SpA, a request for approval of an alternate cooling fan placement for emission testing of the Lamborghini Aventador due to the unique configuration of the vehicle.

A diagram and explanation of the details is attached.

If you have any questions with regard to this request please contact our office in Auburn Hills at (248) 754-4229 or 754-4219.

Sincerely,



Leonard W. Kata  
Volkswagen Group of America, Inc.

Engineering and Environmental Office

Enclosure(s)

VOLKSWAGEN GROUP OF AMERICA, INC.  
3800 HAMLIN ROAD  
AUBURN HILLS, MI 48326  
PHONE +1 248 754 5000

# Ex. 4 - CBI

# Ex. 4 - CBI

# Ex. 4 - CBI

**To:** sebastian.berenz@vw.com[]  
**Cc:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US@EPA;CN=Bernd Liebner/OU=AA/O=USEPA/C=US@EPA[]; N=Bernd Liebner/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Tue 2/21/2012 2:25:10 PM  
**Subject:** R104RXX-0077  
R104RXX-0077 2-15-12.pdf

Hello Sebastian,

Please find enclosed the Laboratory Test Data for the Subject vehicle. If you have any questions, please contact me.

R104RXX-0061 is to test tomorrow, 2-22-12. The lab is performing the Road load Derivation and prep today.

Good to see you and Brian this morning!


Thanks, and best regards,


Vince Mazaitis





C150

~~FILE~~

NVFEL Laboratory Test Data							CVS
These Laboratory Test Results Are Not Final							
Test Number: 2012-0104-002		Vehicle ID: R104RXX-0077					
	Test Date: 2/15/2012		MFR Name: AUDI				
	Key Start / Hot Soak: 09:03:30 / 09:51		MFR Codes: 640 ADX				
	Fuel Container ID: F00023		Config #: 00				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: MANUAL				
	Test Procedure: 21 Fed Fuel 2-day Exhaust (CAN LOAD)(ftp)		Shift Schedule: A09980004				
	Calculation Method: Gasoline		Beginning Odometer: 034495.0 MI				
Pretest Remarks:			Drive Schedule: ftp3bag				
			Soak Period: 20.1 hours				
Quality Control: This data meets all automated quality control checks. No problems were identified.							
<b>Bag Data</b>							
	HC-FID	CO	NOx	CO2	CH4	NonMeth HC	
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
<b>Phase 1</b>							
Sample	53.123	20.104	2.517	1.109	2.849		
Ambient	2.479	0.000	0.014	0.044	2.022		
Net Concentration	50.850	20.104	2.504	1.069	0.996	49.670	
Remarks:							
<b>Phase 2</b>							
Sample	2.465	0.072	0.356	0.769	1.917		
Ambient	2.499	0.000	0.011	0.044	2.019		
Net Concentration	0.109	0.072	0.346	0.728	0.013	0.093	
Remarks:							
<b>Phase 3</b>							
Sample	10.301	6.702	0.874	0.946	2.157		
Ambient	2.501	0.000	0.011	0.045	2.012		
Net Concentration	7.977	6.702	0.864	0.905	0.288	7.637	
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>							
	HC-FID	CO	NOx	CO2	CH4	NMHC	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.659	0.526	0.097	439.4	0.015	0.643	20.178
Phase 2	0.002	0.003	0.021	474.4	0.000	0.002	18.815
Phase 3	0.102	0.174	0.033	368.5	0.004	0.098	24.178
Weighted	0.16565	0.15818	0.04030	437.998	0.00443	0.16111	
<b>Fuel Economy</b>							
	Gasoline MPG	Dyno Settings					
Phase 1	20.13	Dyno #: D329 - AWD					
Phase 2	18.77	Inertia: 3875					
Phase 3	24.12	EPA Set Co A: 7.28					
		EPA Set Co B: -0.2736					
		EPA Set Co C: 0.02029					
Weighted	20.29	Emiss-Bench: Mexa 7200sle					

NVFEL Laboratory Test Data							CVS
These Laboratory Test Results Are Not Final							
Test Number: 2012-0104-002				Vehicle ID: R104RXX-0077			
<b>Results</b>	<b>HC-FID</b> (grams)	<b>CO</b> (grams)	<b>NOx</b> (grams)	<b>CO2</b> (grams)	<b>CH4</b> (grams)	<b>NMHC</b> (grams)	<b>Meth Response</b>
	Phase 1	2.353	1.878	0.347	1569.8	0.053	2.298
	Phase 2	0.009	0.012	0.082	1826.6	0.001	0.007
	Phase 3	0.368	0.625	0.120	1325.9	0.015	0.353
<b>Test Conditions</b>							
		<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>		
	Barometer (inHg)	29.21	29.21	29.22			
	Avg Cell Temp (degF)	76.07	74.86	75.05			
	Dew Point (degF)	49.05	48.78	48.68			
	Specific Humidity (grains/lbm)	52.93	52.39	52.17			
	NOx Corr Factor	0.9060	0.9039	0.9031			
	CO2 Dilution Factor	12.000	17.416	14.138			
	CFV Vmix (scf @68F)	2833.46	4843.73	2828.55			
	CVS Flow Rate Avg (scfm)	335.25	334.09	334.48			
	Fan Placement: One Fan - Up - Front						
	Phase Time (secs)	507.11	869.90	507.40			
	Distance (miles)	3.573	3.851	3.598			
	Bag Analysis Time (secs)	879.4	1115.4	162.0			
<b>Data Quality Flags:</b>							
This data meets all automated quality control checks. No problems were identified.							
Msg 000 01 This Module Passed automated quality checks.							

NVFEL Laboratory Test Data						CVS		
These Laboratory Test Results Are Not Final								
Test Number: 2012-0104-003		Vehicle ID: R104RXX-0077						
	Test Date: 2/15/2012		MFR Name: AUDI					
	Key Start: 10:19:41		MFR Codes: 640      ADX					
	Fuel Container ID: F00023		Config #: 00					
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: MANUAL					
	Test Procedure: 03 HWFET (hwfetprep_hwfet)		Shift Schedule: A09980010					
	Calculation Method: Gasoline		Beginning Odometer: 034506.0 MI					
Pretest Remarks:		Drive Schedule: hwfet_hwfet						
<b>Quality Control:</b> This data meets all automated quality control checks. No problems were identified.								
<b>Bag Data</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
<b>Phase 1</b>								
Sample		4.390	17.124	0.303	1.152	2.160		
Ambient		2.493	0.000	0.009	0.046	1.990		
Net Concentration		2.111	17.124	0.295	1.111	0.341	1.707	
Remarks:								
<b>Phase 2</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Phase 3</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Phase 4</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Results</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1		0.014	0.234	0.006	238.2	0.003	0.012	37.397
<b>Fuel Economy</b>		<u>Gasoline MPG</u>		<u>Dyno Settings</u>		<u>Dyno #:</u> D329 - AWD		
Phase 1		37.31				Inertia: 3875		
						EPA Set Co A: 7.28		
						EPA Set Co B: -0.2736		
						EPA Set Co C: 0.02029		
						Emiss-Bench: Mexa 7200sle		
<div style="display: flex; justify-content: space-between;"> <span>v101208 - d329    EPAVDAEm120215095225</span> <span>Page 1 of 2</span> <span>Print Time 15-Feb-2012 11:15</span> </div>								

NVFEL Laboratory Test Data							CVS																																																																		
These Laboratory Test Results Are Not Final																																																																									
Test Number: 2012-0104-003			Vehicle ID: R104RXX-0077																																																																						
	<b>Results</b>	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>																																																																	
		(grams)	(grams)	(grams)	(grams)	(grams)	(grams)																																																																		
	Phase 1	0.146	2.388	0.061	2433.5	0.027	0.118	1.185																																																																	
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"><b>Test Conditions</b></td> <td style="width: 15%; text-align: center;"><u>Phase 1</u></td> <td style="width: 15%; text-align: center;"><u>Phase 2</u></td> <td style="width: 15%; text-align: center;"><u>Phase 3</u></td> <td style="width: 15%; text-align: center;"><u>Phase 4</u></td> </tr> <tr> <td>Barometer (inHg)</td> <td style="text-align: center;">29.22</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Avg Cell Temp (degF)</td> <td style="text-align: center;">74.99</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dew Point (degF)</td> <td style="text-align: center;">48.73</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Specific Humidity (grains/lbm)</td> <td style="text-align: center;">52.29</td> <td></td> <td></td> <td></td> </tr> <tr> <td>NOx Corr Factor</td> <td style="text-align: center;">0.9036</td> <td></td> <td></td> <td></td> </tr> <tr> <td>CO2 Dilution Factor</td> <td style="text-align: center;">11.608</td> <td></td> <td></td> <td></td> </tr> <tr> <td>CFV Vmix (scf @68F)</td> <td style="text-align: center;">4229.26</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="5" style="padding-top: 10px;"> <div style="text-align: center;">CVS Flow Rate Avg (scfm)     331.66</div> </td> </tr> <tr> <td colspan="5" style="padding-top: 10px;"> <div style="text-align: center;">Fan Placement: One Fan - Up - Front</div> </td> </tr> <tr> <td>Phase Time (secs)</td> <td style="text-align: center;">765.11</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Distance (miles)</td> <td style="text-align: center;">10.214</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bag Analysis Time (secs)</td> <td style="text-align: center;">145.9</td> <td></td> <td></td> <td></td> </tr> </table>									<b>Test Conditions</b>	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>	Barometer (inHg)	29.22				Avg Cell Temp (degF)	74.99				Dew Point (degF)	48.73				Specific Humidity (grains/lbm)	52.29				NOx Corr Factor	0.9036				CO2 Dilution Factor	11.608				CFV Vmix (scf @68F)	4229.26				<div style="text-align: center;">CVS Flow Rate Avg (scfm)     331.66</div>					<div style="text-align: center;">Fan Placement: One Fan - Up - Front</div>					Phase Time (secs)	765.11				Distance (miles)	10.214				Bag Analysis Time (secs)	145.9			
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**To:** Lynn Sohacki/AA/USEPA/US@EPA; Bernd Liebner/AA/USEPA/US@EPA; Vincent Mazaitis/AA/USEPA/US@EPA[]; Bernd Liebner/AA/USEPA/US@EPA; Vincent Mazaitis/AA/USEPA/US@EPA[]; Vincent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Johnson, Stuart" [Stuart.Johnson@vw.com]  
**From:** "Berenz, Sebastian"  
**Sent:** Tue 2/21/2012 7:36:16 PM  
**Subject:** EPA Surveillance Program 9AD XV03.23LC - 3.2I AVS MY 2009  
[20120220134011240.pdf](#)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

hello Bernd,

hello Vince,

I just wanted to let you know that we took care of the label issue you found on the test vehicles of EPA's Surveillance Program 9AD XV03.23LC - 3.2I AVS MY 2009.

Attached you will find the official defect report we submitted through Verify.

We went through all of our emission labels for MY2009 and also found a second incorrect label, which we will correct with the same program.

The next step is that we will contact the customers and call the vehicles in to our dealer to make sure that the label will be attached to the vehicles instead of sending out the label to the customer without knowing if it will end up on the car.

So that issue will be solved soon.

Also today we inspected together with Vince the vehicle that failed NMOG in the FTP.

- R104RXX-0077 (2009/A5) – VIN# Ex. 6
- Audi A5 Quattro manual

We really couldn't find anything obvious when we looked at it. There was no active fault code, only one from a month ago.

Since we do not really know what caused the problem, we would be interested in analyzing the vehicle.

Is there a chance to get the customer data from you?

For tomorrow we scheduled a meeting which I have to cancel. I am very sorry for that, but I will try to call Lynn tomorrow morning to go through all of that.

I believe we have everything so far and have to wait to see what the last vehicle looks like.

Please let me know if you have any questions.

Thank you very much.

Best regards.

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

# VOLKSWAGEN

GROUP OF AMERICA

EDIR / VERR Coordinator  
Vehicle Program Group  
Compliance and Innovation Strategies Division  
U.S. Environmental Protection Agency  
2000 Traverwood Drive  
Ann Arbor, Michigan 48105

Christoph Kohnen	Name
Director	Title
EEO	Department
248-754-4201	Phone
248-754-4207	Fax
christoph.kohnen@vw.com	E-Mail

February 20, 2012 Date

Subject: Emissions Defect Information Report  
Reference: EPA Report 0014 / MRN: AD-02-20-2012-1

Dear Sir,

Volkswagen Group of America, Inc. hereby submits an Emissions Defect Information Report in accordance with 40 CFR 85.1903.

VOLKSWAGEN GROUP OF AMERICA, INC.  
3800 HAMILIN ROAD  
AUBURN HILLS, MI 48326  
PHONE +1 248 754 5000

1) The Manufacturer's Corporate Name:

Manufacturer:	Audi AG
Importer:	Volkswagen Group of America, Inc.

Volkswagen Group of America does not, by the filing of this report, admit the existence of a defect subject to the production warranty provided by section 207 (a) of the Clean Air Act, as amended.

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gather and present the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowingly and willfully submitting a materially false statement.

Volkswagen Group of America, Inc. ("VWGoA") respectfully requests that this forwarding letter be considered confidential. The contact information contained within, if released to outside sources, would interfere with the privacy and daily responsibilities of the author.

Should you have any questions or comments regarding the subject Emissions Defect Information Report, please contact Michael Hennard of my staff at (248) 754 4202.



Christoph Kohnen  
Engineering and Environmental Office

## Emissions Defect Information Report (EDIR)

\* = required field

### Report / Manufacturer Information

☒ New EDIR ☐ Correct / Update EDIR \*

Manufacturers must submit EDIRs within 15 working days after an emission-related defect is found.

EPA EDIR Number \*

Manufacturer EDIR Number \*

Form Version Number \*

Additional email address

### Defect Information

Problem category \*

Defect description \*   
Test Group 1:  
- Correct Test Group: 9ADXV03.23LC  
- Text Group on label installed in production: 9ADXT03.23LC  
Test Group 2:  
- Correct Test Group: 9ADXV03.1374  
- Text Group on label installed in production: 9ADXT03.1374

Defect identification source / method \*

Address(es) of plants \*

Evaluation of the emissions impact when the vehicle / engine exhibits the defect \*

Are there any available emissions data that relates to the defect? \* ☐ Yes ☒ No



### Emissions Defect Information Report (EDIR)

\* = required field

Does the defect cause or result in On-Board Diagnostic Malfunction Indicator Lamp illumination? \* ☐ Yes ☒ No

Describe any drivability  
problems which a defective  
vehicle/engine would exhibit \*

Not applicable

Description of anticipated  
manufacturer follow up \*

Production: Vehicle no longer in production

Service: Replace all involved labels via Service Action with customer notification.

Type of related documents to be submitted to the Verify Document Module \*  
(CTRL + Click to select multiple value(s))

No Related Documents to Submit  
Available Emissions Data  
Repair Instructions  
Technical Service Bulletin  
Other (Specify in 'Notes' field)

Number of related documents to be submitted to Verify Document Module \*

1

Notes

CBI Document - Forwarding Letter

\* = required field

## Emissions Defect Information Report (EDIR) Affected Vehicles / Engines Description

Test Group / Engine Family Information				<input type="button" value="Delete Test Group / Engine Family"/>
Test Group / Engine Family *	Certified Sales Area *	Total Production Volume Count *	Potential Number Affected *	Actual Number Identified *
9AD XV03.23LC	50-State (CA+177 States+FED)	9,023	9,023	3
<input type="button" value="Add Vehicle / Engine"/>				
Vehicle / Engine Information				
Make *	Model / Calibration *	Model Year *	Displacement (Liters) *	
Audi	Audi A4 Quattro / Audi A5 Quattro	2009	3.2	<i>Delete This Vehicle / Engine</i>

Test Group / Engine Family Information				<input type="button" value="Delete Test Group / Engine Family"/>
Test Group / Engine Family *	Certified Sales Area *	Total Production Volume Count *	Potential Number Affected *	Actual Number Identified *
9AD XV03.1374	50-State (CA+177 States+FED)	779	779	1
<input type="button" value="Add Vehicle / Engine"/>				
Vehicle / Engine Information				
Make *	Model / Calibration *	Model Year *	Displacement (Liters) *	
Audi	Audi A6 / Audi A4 Cabrio Quarrto	2009	3.1	<i>Delete This Vehicle / Engine</i>

**To:** "Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Rodgers, William" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 2/22/2012 12:01:43 AM  
**Subject:** Re: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador  
[Lambo alternate fan approval.pdf](#)  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Thank you , that is clearer.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 02/21/2012 07:32 AM  
Subject: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

Hello Jim,

# Ex. 4 - CBI

Regards  
A.Baraldi

Please let me know what, if anything, should be submitted through the Verify System.

Best regards,

Bob Hart

From: Hart, Robert (VWoA)  
Sent: Monday, February 13, 2012 1:28 PM  
To: Jim Snyder ([Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov))

Cc: Giles, Michael; Rodgers, William

Subject: VW Group: Request for Approval for an Alternate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

Hello Jim,

The Verify System is down, so if necessary, I will submit this through it when the system is working again.

The attachment is a request for approval of an alternate cooling fan for emission testing of the MY 2013 Lamborghini Aventador. Please see the attachment.

Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com

[attachment "CBI\_DNLXV06.5L83\_RFA\_STP\_R00.PDF" deleted by Jim Snyder/AA/USEPA/US] [attachment "Lamborghini Aventador Fan Placement.pdf" deleted by Jim Snyder/AA/USEPA/US]

# VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder  
Compliance and Innovative Strategies Division  
Office of Mobile Sources  
U. S. Environmental Protection Agency  
2000 Traverwood Drive  
Ann Arbor, MI 48105

Leonard W. Kata Name  
Manager Title  
EEO Department  
248-754-4204 Phone  
248-754-4207 Fax  
leonard.kata@vw.com E-Mail

February 13, 2012 Date

Subject: Approval Request for Alternate Cooling Fan Placement for Emissions  
Testing for the MY 2013 Lamborghini Aventador

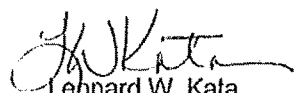
Dear Mr. Snyder,

We submit, on behalf of Automobili Lamborghini SpA, a request for approval of an alternate cooling fan placement for emission testing of the Lamborghini Aventador due to the unique configuration of the vehicle.

A diagram and explanation of the details is attached.

If you have any questions with regard to this request please contact our office in Auburn Hills at (248) 754-4229 or 754-4219.

Sincerely,



Leonard W. Kata  
Volkswagen Group of America, Inc.

**REVIEWED AND ACCEPTED**  
DATE 2/22/12 EPA REP [Signature]

Engineering and Environmental Office

Enclosure(s)

VOLKSWAGEN GROUP OF AMERICA, INC.  
3800 HAMLEN ROAD  
AUBURN HILLS, MI 48326  
PHONE 41 248 754 5000

**Ex. 4 - CBI**

**Ex. 4 - CBI**

# Ex. 4 - CBI

**Ex. 4 - CBI**

**Ex. 4 - CBI**



# Ex. 4 - CBI



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Wed 2/22/2012 1:52:14 PM  
**Subject:** RE: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Thank you Jim.

We just submitted the supplemental information for this vehicle. Please advise of the test date at your earliest convenience.

Regards,

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, February 21, 2012 7:02 PM  
To: Hart, Robert (VWoA)  
Cc: Giles, Michael; Rodgers, William  
Subject: Re: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

Thank you , that is clearer.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 02/21/2012 07:32 AM  
Subject: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

Hello Jim,

# Ex. 4 - CBI

A.Baraldi

Please let me know what, if anything, should be submitted through the Verify System.

Best regards,

Bob Hart

From: Hart, Robert (VWoA)  
Sent: Monday, February 13, 2012 1:28 PM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov)  
Cc: Giles, Michael; Rodgers, William  
Subject: VW Group: Request for Approval for an Alternate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

Hello Jim,

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Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com

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**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Thur 2/23/2012 1:07:31 PM  
**Subject:** RE: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Hi Jim,

We received a EPA test date for this vehicle of 3/21. As I mentioned in my voice message today, Is it possible to bump this back a week? I left a message last week requesting a change to our originally available date last week if possible.

Just to clarify Lamborghini requested a change in earliest delivery date to 3/22. Please let me know if there is a problem with changing date so I can follow up.

Sorry for the confusion.

Regards

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, February 21, 2012 7:02 PM  
To: Hart, Robert (VWoA)  
Cc: Giles, Michael; Rodgers, William  
Subject: Re: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

Thank you , that is clearer.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 02/21/2012 07:32 AM  
Subject: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

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# Ex. 4 - CBI

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Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com

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**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 2/23/2012 1:41:07 PM  
**Subject:** RE: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Sorry, I thought that got revised . I just called Ben and asked him to push it back a week.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Giles, Michael" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 02/23/2012 08:07 AM  
**Subject:** RE: FW: VW Group: Request for Approval for an Altenate Cooling Fan for Emission Testing for the MY 2013 Lamborghini Aventador

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**To:** Hart, Robert (VWoA)  
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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 02/21/2012 07:32 AM  
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Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com

[attachment "CBI\_DNLXV06.5L83\_RFA\_STP\_R00.PDF" deleted by Jim Snyder/AA/USEPA/US] [attachment  
"Lamborghini Aventador Fan Placement.pdf" deleted by Jim Snyder/AA/USEPA/US]

**To:** "Beierschmitt, Thomas (T.A.)" [tbeiers1@ford.com]; 'Bill Pagels' [bill.pagels@meidenamerica.com]; 'Bob Maxwell' [remaxwell@comcast.net]; hris Nevers/AA/USEPA/US@EPA; "Dave Kosmalski" [david.kosmalski@gm.com]; 'Dave Kosmalski' [david.kosmalski@gm.com]; 'Dennis Pawlak' [Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid' [Douglas.Reid@na.mitsubishi-motors.com]; 'Duoba, Mike' [mduoba@anl.gov]; 'Jeff Foor' [jdf14@chrysler.com]; 'Jim Smith' [james.smith@chrysler.com]; im Snyder/AA/USEPA/US@EPA; "Keith Thompson" [Keith.Thompson@bepco.com]; 'Keith Thompson' [Keith.Thompson@bepco.com]; 'Kent Theil' [okt@chrysler.com]; 'kyle.bedsole@gm.com' [kyle.bedsole@gm.com]; 'Mahmoud Yassine' [mky@chrysler.com]; 'Marc Belzile' [marc.a.belzile@tc.gc.ca]; 'mark paxton' [mpaxton@ganassi.com]; 'MBrussow@sae.org' ['MBrussow@sae.org']; 'Meyer, Norm' [norm.meyer@tc.gc.ca]; Okawa, Naoyasu (N.) [okawa.n@mazda.co.jp]; 'Paulina.Carl@epamail.epa.gov' ['Paulina.Carl@epamail.epa.gov']; Peabody, Jason (J.A.) [jpeabod6@ford.com]; ete Janosi [petejanosi@yahoo.com]; Suanne.Thomas@vw.com [Suanne.Thomas@vw.com]; 'takashi\_a\_fujiwara@ahm.honda.com' [takashi\_a\_fujiwara@ahm.honda.com]; iffany Jackson [Jackst2@nrd.nissan-usa.com]; homas SchrodT/AA/USEPA/US@EPA; "tom.beierschmitt@tema.toyota.com" ['tom.beierschmitt@tema.toyota.com']; 'tom.beierschmitt@tema.toyota.com' ['tom.beierschmitt@tema.toyota.com']; 'tommy\_chang@ahm.honda.com' ['tommy\_chang@ahm.honda.com']; 'William Meschievitz' [william.meschievitz@tema.toyota.com]; Khan, Farrukh [KhanF@NRD.NISSAN-USA.COM]

**Cc:** Carl Paulina/AA/USEPA/US@EPA]

**From:** "Glodich, Jeffrey (J.M.)"

**Sent:** Thur 2/23/2012 5:18:39 PM

**Subject:** Rescheduled: J2951 Phase II Review (Mar 22 01:00 PM EDT in Toyota, Ann Arbor)

Rescheduled due to conflicts.

Purpose:

- Discuss implementation and macro issues
- Revisit deferred issues that were not addressed in the initial publication

Meeting Info:

**Ex. 6**

Web Address <https://www.connectmeeting.att.com><<https://www.connectmeeting.att.com>>

**Ex. 6**

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Fri 2/24/2012 7:57:43 PM  
**Subject:** Test data for in-use vehicle R104-0061 and R104-0077  
[R104RXX-0061.pdf](#)  
[R104RXX-0049.pdf](#)

Hi, Sebastian.


The data for the above vehicles is attached. Also, I got approval from the privacy office to contact the owners of the vehicle and ask if I can give you their contact information. I will be calling them Monday.

Please give me a call if you have any questions.

Have a good weekend.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

C150

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results							
Test Number: 2012-0105-002			Vehicle ID: R104RXX-0061				
	Test Date: 2/22/2012		MFR Name: AUDI				
	Key Start / Hot Soak: 14:07:03 / 09:39		MFR Codes: 640      ADX				
	Fuel Container ID: F00023		Config #: 00				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: MANUAL				
	Test Procedure: 21 Fed Fuel 2-day Exhaust (CAN LOAD)(ftp)		Shift Schedule: A09980004				
	Calculation Method: Gasoline		Beginning Odometer: 019364.0 MI				
Pretest Remarks:			Drive Schedule: ftp3bag				
			Soak Period: 23.5 hours				
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	47.882	41.863	1.426	1.126	3.078		
Ambient	2.236	0.000	0.005	0.043	1.907		
Net Concentration	45.835	41.863	1.421	1.087	1.332	44.256	
Remarks:							
<b>Phase 2</b>							
Sample	2.395	0.124	0.393	0.768	1.808		
Ambient	2.252	0.000	0.004	0.043	1.902		
Net Concentration	0.272	0.124	0.389	0.728	0.015	0.255	
Remarks:							
<b>Phase 3</b>							
Sample	3.691	9.269	0.654	0.966	1.961		
Ambient	2.242	0.000	0.005	0.043	1.898		
Net Concentration	1.611	9.269	0.650	0.926	0.200	1.375	
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.580	1.069	0.054	436.1	0.019	0.560	20.304
Phase 2	0.005	0.005	0.024	464.5	0.000	0.005	19.213
Phase 3	0.020	0.235	0.025	368.8	0.003	0.017	24.173
Weighted	0.12855	0.28883	0.03025	432.253	0.00502	0.12340	
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>	<u>Dyno Settings</u>					
Phase 1	20.26	Dyno #: D329 - AWD					
Phase 2	19.17	Inertia: 3875					
Phase 3	24.12	EPA Set Co A: -1.94					
		EPA Set Co B: -0.0912					
		EPA Set Co C: 0.01842					
Weighted	20.57	Emiss-Bench: Mexa 7200sle					

0.128

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0105-002

Vehicle ID: R104RXX-0061

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	2.067	3.811	0.193	1555.1	0.069	1.996	1.185
Phase 2	0.021	0.019	0.091	1779.8	0.001	0.020	
Phase 3	0.072	0.841	0.088	1321.0	0.010	0.062	

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.54	28.53	28.53	
Avg Cell Temp (degF)	73.88	74.27	74.62	
Dew Point (degF)	48.88	48.67	49.13	
Specific Humidity (grains/lbm)	53.85	53.42	54.37	
NOx Corr Factor	0.9096	0.9079	0.9116	
CO2 Dilution Factor	11.804	17.438	13.857	
CFV Vmix (scf @68F)	2761.45	4720.13	2753.54	
CVS Flow Rate Avg (scfm)	326.80	325.68	325.93	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.00	869.60	506.90	
Distance (miles)	3.566	3.832	3.582	
Bag Analysis Time (secs)	879.1	1102.4	161.6	

0150

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0105-003

Vehicle ID: R104RXX-0061

### Test Information



Test Date: 2/22/2012

Key Start: 15:18:03

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Test Fuel

Test Procedure: 03 HWFET (hwfetprep\_hwfet)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: AUDI

MFR Codes: 640 ADX

Config #: 00

Transmission: MANUAL

Shift Schedule: A09980010

Beginning Odometer: 019375.0 MI

Drive Schedule: hwfet\_hwfet

### Bag Data

#### Phase 1

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Sample	3.920	12.683	0.288	0.821	2.094	
Ambient	2.463	0.000	0.082	0.044	1.916	
Net Concentration	1.608	12.683	0.211	0.780	0.295	1.258

Remarks:

#### Phase 2

Sample  
Ambient  
Net Concentration

Remarks:

#### Phase 3

Sample  
Ambient  
Net Concentration

Remarks:

#### Phase 4

Sample  
Ambient  
Net Concentration

Remarks:

### Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC (gpm)	Vol MPG (mpg)
Phase 1	0.015	0.246	0.006	237.3	0.003	0.012	37.538

### Fuel Economy

Gasoline MPG

Phase 1 37.45

### Dyno Settings

Dyno #: D329 - AWD

Inertia: 3875

EPA Set Co A: -1.94

EPA Set Co B: -0.0912

EPA Set Co C: 0.01842

Emiss-Bench: Mexa 7200sle



# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0105-003

Vehicle ID: R104RXX-0061


### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.158	2.514	0.062	2427.8	0.034	0.124	1.185

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.52			
Avg Cell Temp (degF)	75.79			
Dew Point (degF)	46.82			
Specific Humidity (grains/lbm)	49.82			
NOx Corr Factor	0.8942			
CO2 Dilution Factor	16.287			
CFV Vmix (scf @68F)	6011.23			
CVS Flow Rate Avg (scfm)	471.41			
Fan Placement:	One Fan - Up - Front			
Phase Time (secs)	765.09			
Distance (miles)	10.230			
Bag Analysis Time (secs)	146.0			

NVFEL Laboratory Test Data						CVS	
Final Laboratory Test Results							
Test Number: 2012-0103-002				Vehicle ID: R104RXX-0049			
	<b>Test Information</b>						
	Test Date: 2/9/2012			MFR Name: AUDI			
	Key Start / Hot Soak: 08:41:13 / 09:50			MFR Codes: 640 ADX			
	Fuel Container ID: F00023			Config #: 00			
	Fuel Type: 61 Tier 2 Cert Test Fuel			Transmission: AUTO			
	Test Procedure: 21 Fed Fuel 2-day Exhaust (CAN LOAD)(ftp)			Shift Schedule: A09980005			
Calculation Method: Gasoline				Beginning Odometer: 029777.0 MI			
Pretest Remarks:				Drive Schedule: ftp3bag			
				Soak Period: 19.5 hours			
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	18.414	48.352	2.684	1.061	3.465		
Ambient	2.438	0.000	0.010	0.044	1.993		
Net Concentration	16.169	48.352	2.675	1.020	1.631	14.237	
Remarks:							
<b>Phase 2</b>							
Sample	2.394	1.528	0.043	0.678	1.898		
Ambient	2.456	0.000	0.008	0.044	1.984		
Net Concentration	0.062	1.528	0.035	0.637	0.014	0.045	
Remarks:							
<b>Phase 3</b>							
Sample	4.213	17.524	0.179	0.912	2.247		
Ambient	2.446	0.000	0.008	0.044	1.973		
Net Concentration	1.933	17.524	0.172	0.871	0.408	1.450	
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.209	1.261	0.103	418.2	0.024	0.184	21.210
Phase 2	0.001	0.064	0.002	416.6	0.000	0.001	21.420
Phase 3	0.025	0.457	0.007	357.2	0.006	0.019	24.932
Weighted	0.05089	0.42035	0.02443	400.589	0.00691	0.04381	
<b>Fuel Economy</b>	<u>Gasoline MPG</u>					<u>Dyno Settings</u>	<u>Dyno #:</u> D329 - AWD
Phase 1	21.16					Inertia: 4250	
Phase 2	21.37					EPA Set Co A: -0.34	
Phase 3	24.87					EPA Set Co B: 0.1024	
						EPA Set Co C: 0.02006	
Weighted	22.16					Emiss-Bench: Mexa 7200sle	
<div style="display: flex; justify-content: space-between;"> <span>v101208 - d329 EPAVDAEm120209083322</span> <span>Page 1 of 2</span> <span>Print Time 13-Feb-2012 06:05</span> </div>							

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0103-002

Vehicle ID: R104RXX-0049

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.751	4.532	0.372	1502.7	0.088	0.661	1.185
Phase 2	0.005	0.245	0.008	1604.0	0.001	0.004	
Phase 3	0.090	1.639	0.024	1279.7	0.022	0.067	

## Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.26	29.26	29.25	
Avg Cell Temp (degF)	74.82	75.18	75.69	
Dew Point (degF)	48.64	48.69	48.66	
Specific Humidity (grains/lbm)	52.03	52.14	52.07	
NOx Corr Factor	0.9026	0.9030	0.9027	
CO2 Dilution Factor	12.554	19.743	14.664	
CFV Vmix (scf @68F)	2842.74	4862.09	2836.21	
CVS Flow Rate Avg (scfm)	336.35	335.47	335.51	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.10	869.60	507.20	
Distance (miles)	3.594	3.851	3.583	
Bag Analysis Time (secs)	879.1	1113.6	161.5	

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0103-003

Vehicle ID: R104RXX-0049

### Test Information



Test Date: 2/9/2012

Key Start: 09:52:17

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Test Fuel

Test Procedure: 03 HWFET (hwfetprep\_hwfet)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: AUDI

MFR Codes: 640 ADX

Config #: 00

Transmission: AUTO

Shift Schedule: A09980011

Beginning Odometer: 029788.0 MI

Drive Schedule: hwfet\_hwfet

### Bag Data

	HC-FID	CO	NOx	CO2	CH4	NonMeth HC
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Phase 1						
Sample	3.533	15.407	0.262	1.158	2.059	
Ambient	2.442	0.000	0.010	0.044	1.960	
Net Concentration	1.303	15.407	0.254	1.117	0.269	0.984

Remarks:

### Phase 2

Sample  
Ambient  
Net Concentration

Remarks:

### Phase 3

Sample  
Ambient  
Net Concentration

Remarks:

### Phase 4

Sample  
Ambient  
Net Concentration

Remarks:

### Results

	HC-FID	CO	NOx	CO2	CH4	NMHC	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.009	0.210	0.005	239.7	0.002	0.007	37.176

### Fuel Economy

Gasoline MPG  
Phase 1 37.09

### Dyno Settings

Dyno #: D329 - AWD  
Inertia: 4250

EPA Set Co A: -0.34  
EPA Set Co B: 0.1024  
EPA Set Co C: 0.02006

Emiss-Bench: Mexa 7200sle

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0103-003

Vehicle ID: R104RXX-0049

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.090	2.151	0.053	2451.6	0.022	0.068	1.185

### Test Conditions

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	29.25			
Avg Cell Temp (degF)	75.76			
Dew Point (degF)	48.73			
Specific Humidity (grains/lbm)	52.23			
NOx Corr Factor	0.9033			
CO2 Dilution Factor	11.554			
CFV Vmix (scf @68F)	4234.56			
CVS Flow Rate Avg (scfm)	332.12			
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	765.00			
Distance (miles)	10.227			
Bag Analysis Time (secs)	145.9			

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0103-004

Vehicle ID: R104RXX-0049

### Test Information



Test Date: 2/9/2012

Key Start: 10:32:39

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Test Fuel

Test Procedure: 90 US06 (us06warmup\_us06)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: AUDI

MFR Codes: 640 ADX

Config #: 00

Transmission: AUTO

Shift Schedule: A09980041

Beginning Odometer: 029809.0 MI

Drive Schedule: us06\_us06

### Bag Data

	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Phase 1						
Sample	3.803	41.038	0.965	1.137	2.041	
Ambient	2.424	0.000	0.016	0.045	1.946	
Net Concentration	1.585	41.038	0.950	1.095	0.261	1.276

Remarks:

### Phase 2

Sample  
Ambient  
Net Concentration

Remarks:

### Phase 3

Sample  
Ambient  
Net Concentration

Remarks:

### Phase 4

Sample  
Ambient  
Net Concentration

Remarks:

### Results

	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.018	0.955	0.033	400.5	0.003	0.015	22.199

### Fuel Economy

Gasoline MPG  
Phase 1 22.15

### Dyno Settings

Dyno #: D329 - AWD  
Inertia: 4250

EPA Set Co A: -0.34

EPA Set Co B: 0.1024

EPA Set Co C: 0.02006

Emiss-Bench: Mexa 7200sle

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0103-004

Vehicle ID: R104RXX-0049

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.146	7.635	0.262	3202.4	0.028	0.118	1.185



### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.24			
Avg Cell Temp (degF)	75.11			
Dew Point (degF)	48.48			
Specific Humidity (grains/lbm)	51.74			
NOx Corr Factor	0.9015			
CO2 Dilution Factor	11.742			
CFV Vmix (scf @68F)	5643.25			
CVS Flow Rate Avg (scfm)	563.10			
Fan Placement: USO6 Only - One Large Fan - Up - Front				
Phase Time (secs)	601.29			
Distance (miles)	7.996			
Bag Analysis Time (secs)	156.0			

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Fri 2/24/2012 8:00:15 PM  
**Subject:** Automatic reply: Test data for in-use vehicle R104-0061 and R104-0077  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>

Currently I am out of office until March 8th. Respond times to mails may increase.

- For all IUVP questions, please contact Mr. Garrett Horton 248-754-4231
- For all Screening related issues, please contact Mr. Thomas Styczynski.

I will be in contact with Garrett on a regular basis, so please inform him of any issues or concerns.

In urgent cases please call my cell under 248 736 3487.

Thank you.

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
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E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)



<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Sun 2/26/2012 7:37:39 PM  
**Subject:** RE: Test data for in-use vehicle R104-0061 and R104-0077

Hello Lynn,

Thank you very much for the information.

Looks like we have on the last test result again too high NMOG results.  
We would like to take a look at the vehicle like we did with the other one.

Please let me know if this would be possible.

I will call you on Monday to discuss the next steps.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

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E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Friday, February 24, 2012 2:58 PM  
To: Berenz, Sebastian  
Subject: Test data for in-use vehicle R104-0061 and R104-0077

Hi, Sebastian.

The data for the above vehicles is attached. Also, I got approval from the privacy office to contact the owners of the vehicle and ask if I can give you their contact information. I will be calling them Monday.

Please give me a call if you have any questions.

Have a good weekend.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: R104RXX-0061.pdf)(See attached file:  
R104RXX-0049.pdf)

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Mon 2/27/2012 3:42:21 PM  
**Subject:** Recruiting 2 additional vehicles for class R104

Hi, Sebastian.

We will recruit two additional vehicles for this class. One respondent had the hood replaced so the under hood label is gone. Can you please let me know the test group of this VIN: **Ex. 6**

Thanks,

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Tue 2/28/2012 7:46:11 PM  
**Subject:** Owner contact information

Hi, Sebastian.

I got permission to contact the vehicle owner to ask him/her if I can give their phone number to Audi to follow up on their vehicle. I haven't called the owner yet because I wasn't sure if you were going to wait until you got back from Germany. Would you prefer to get their info soon or would you like to wait until you return?

Regards,

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Tue 2/28/2012 9:25:55 PM  
**Subject:** Fw: R104RXX-0061 (2009 Audi/A5)

Hi, Sebastian.

This owner has also given permission for me to give you their contact information. The owner's name is

Ex. 6

His home phone number is

Ex. 6

For your information, this vehicle has not been released back to the owners yet but it will be going back to them in the next few days.

Regards,

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

----- Forwarded by Lynn Sohacki/AA/USEPA/US on 02/28/2012 04:23 PM -----

**From:** Ex. 6  
**To:** Lynn Sohacki/AA/USEPA/US@EPA  
**Date:** 02/28/2012 04:20 PM  
**Subject:** Re: R104RXX-0061 (2009 Audi/A5)

Hi Lynn,

The participant's name is Ex. 6 Home phone number is Ex. 6

Ex. 6

URS

Quality Control Auditor

Ex. 6

**From:** Lynn Sohacki/AA/USEPA/US  
**To:** Ex. 6  
**Date:** 02/28/2012 04:13 PM  
**Subject:** Re: R104RXX-0061 (2009 Audi/A5)

Hi, Ex. 6

Can I please have the owners contact information on this vehicle?

Thanks

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: **Ex. 6**  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 02/28/2012 02:06 PM  
Subject: R104RXX-0061 (2009 Audi/A5)

Lynn,

The SPO-1 Maint. has been completed on this vehicle and it is now under you for your decision.

Thank you,

**Ex. 6**  
URS  
Quality Control Auditor  
**Ex. 6**

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Wed 2/29/2012 3:00:06 PM  
**Subject:** Fw: R104RXX-0077 (2009 Audi/A5)

Hi, Sebastian.

I got a call from [Ex. 6] this morning. He is very enthusiastic about having Audi test his vehicle. He will be going to Germany this summer and wants to make sure that the car is running as it should.

He asked for your phone number because he is interested in starting this process as soon as possible. He also asked for me to forward his e-mail to you: [Ex. 6]

Please let me know if you'd like me to forward your number to him.

Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

----- Forwarded by Lynn Sohacki/AA/USEPA/US on 02/29/2012 09:55 AM -----

**From:** Lynn Sohacki/AA/USEPA/US  
**To:** Sebastian.Berenz@vw.com  
**Date:** 02/28/2012 04:20 PM  
**Subject:** Fw: R104RXX-0077 (2009 Audi/A5)

Hi, Sebastian.

The owner's name for the above vehicle is [Ex. 6] and his phone number is [Ex. 6]. He can be reached between the hours of 08:00-18:00.

I will be contacting the other owner shortly.

Regards.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)



**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Thur 3/1/2012 1:33:46 PM  
**Subject:** RE: 2011 LT CAFE Processing (Submission 253)

Hi Bob;

Thanks for the instructions, but I need a couple things clarified. We made the first section changes logged on as Audi now, so step one and two are completed. Now as I log on as Volkswagen and you said to re-submit with division code=1, am I to assume that this will be a new label entry, which means I have to create a new label index number, correct? I cannot delete index 40, 41 and 42 as an Audi index so is that something that you can tag later on when your CAFE audit program finds a label that is not used?

We are have a great deal of difficulty when it comes to manufacture code and division numbers. When I enter a label and go back to it later in time, I have no indication of how I logged, Volkswagen or Audi. Can we have a discussion regards this issue?

Is it possible to create a Volkswagen Group manufacturer code with division codes for the brands Volkswagen, Audi, Bentley, Lamborghini and Bugatti? If something were to be created like that, how much can be accomplished by Verify and how much work would it be for us? Presently, it is twice as much work to make all this work with the granting of permissions and such. Additionally, the Verify help line instructed me to enter footprint information for all car lines for the CAFE as Volkswagen (VWX). I think that the next problem will be agreeing with the reformed CAFE standard that EPA calculates versus our calculation.

Thanks,  
Richard 248 754-4213

**To:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** CN=David Good/OU=AA/O=USEPA/C=US@EPA;"Kata, Leonard"  
[Leonard.Kata@vw.com]; Kata, Leonard" [Leonard.Kata@vw.com]; Harris, Dale"  
[Dale.Harris@vw.com]  
**Bcc:** []  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Thur 3/1/2012 2:21:57 PM  
**Subject:** 2011 Volkswagen Group NOx Fleet Average Credits  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

[attachment "CBI\_BVWX\_COMMON\_CR1\_ABT\_R00.pdf" deleted by David Good/AA/USEPA/US]  
[attachment "CBI\_BVWX\_COMMON\_CR1\_ABT\_R00.xlsx" deleted by David Good/AA/USEPA/US]  
Hello Jim;

Please find attached, the cover letter with spreadsheet printouts of the EPA NOx fleet average template as well as the Excel spreadsheet file. As it was stated in the letter the spreadsheet does not include the HLDT volumes, but it is of little consequence because all models are certified to the 0.07 g/mi NOx standard or better. None of the HLDT are certified better than 0.07 NOx. The total number of 2011 Volkswagen Group LDV/LLDT and HLDT is 333,336 units. If you see anything that needs to be corrected please let me know. I will attempt to place the pdf file into Verify, if you can tell me where it goes.

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA;"Kata, Leonard" [Leonard.Kata@vw.com]; Kata, Leonard" [Leonard.Kata@vw.com]; Harris, Dale" [Dale.Harris@vw.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Thur 3/1/2012 2:21:57 PM  
**Subject:** 2011 Volkswagen Group NOx Fleet Average Credits  
[CBI\\_BVWX\\_COMMON\\_CR1\\_AB\\_T\\_R00.xlsx](#)  
[CBI\\_BVWX\\_COMMON\\_CR1\\_AB\\_T\\_R00.pdf](#)  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

Hello Jim;

Please find attached, the cover letter with spreadsheet printouts of the EPA NOx fleet average template as well as the Excel spreadsheet file. As it was stated in the letter the spreadsheet does not include the HLDT volumes, but it is of little consequence because all models are certified to the 0.07 g/mi NOx standard or better. None of the HLDT are certified better than 0.07 NOx. The total number of 2011 Volkswagen Group LDV/LLDT and HLDT is 333,336 units. If you see anything that needs to be corrected please let me know. I will attempt to place the pdf file into Verify, if you can tell me where it goes.

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**From:** "Harris, Dale"  
**Sent:** Fri 3/2/2012 6:29:15 PM  
**Subject:** GHG Early Credit Report - Question (VWGoA)  
[Early Credit Report.xlsx](#)  
[@vw.com](#)  
<http://www.volkswagengroupamerica.com/>

Dave

Hello!!

I am Dale Harris Certification Specialist reporting to Len Kata at VWGoA. I am preparing the GHG Early Credit Report for submission and need clarity/direction on a couple of issues.

1. I am using the 'Banking & Trading Summary Table' provided via the EPA GHG site for the Early Credit Report. Is this the appropriate template??
2. I have modified the template to include multiple car and truck rows to enable pathway 3 calculations to appear appropriately. Is it ok to modify the template??

In addition I have attached a draft version of the report that will enable you to provide responses to the questions above. Thanks!!!

Regards,

Dale Harris

Certification Specialist

VOLKSWAGEN Group of America, Inc.

Engineering and Environmental Office (EEO)  
3800 Hamlin

AuburnHills Michigan 48326

United States of America

P: +1 248 754-4218

E: Dale.Harris@vw.com

<http://www.volkswagengroupamerica.com/>

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**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Tue 3/6/2012 5:44:29 PM  
**Subject:** VW Group - Jetta 1.4L ORVR Revision  
attm1 MY2013 JettaHybrid sys-overview 6.pdf

Hello Lynn,

Please find attached a revised document with improved diagrams to describe the Jetta Hybrid ORVR system.

In addition, I have attached answers to some of the questions we discussed. If you have any further questions, please let me know. If needed I can try set up a conference call to resolve any details.

Regards,

Mike

Q1 Page 2, Filling Ventilation:

- a) Arrow direction seems wrong in the connection between DMTL to canister. (corrected in new file)
- b) Please clarify in drawing. (corrected in new file)

Q2 If engine is off, there are arrows from Canister and fuel tank to the engine – please confirm / clarify if these connections are present (open) during the fill. (corrected in new file)

Q3: Operation Ventilation Diagram (pg 3)

- a) Shows fuel into tank during this phase, which is incorrect. (corrected in new file)

Q4: EPA Requests some specifics details about the Regeneration Phase

- a) Is the engine on/off during this phase? On!
- b) Does the tank de-pressurization occur during this step, or somewhere other step? Yes!
- c) What is vapor path during de-pressurization? (When the red/black broken line is red)
- d) When does de-pressurization occur (if not in this step)? No, look at c)
- e) Please update diagram for example shows gasoline going into the tank should be removed(corrected in new file)
- f) A detailed text description of the regeneration the would help, with some details of when it occurs, engine on or off or both, what causes it (button push?), etc. (corrected in new file)

Q5: Please describe all situations where DMTL would have reverse flow, and add this to diagrams

Only in case of refueling, preparation for refueling and after diagnostic a reverse flow over DMTL would be activ.

Q6: For the diagrams, please describe the yellow, black and mixed lines in the keys (for example in Regeneration, the line between FTIR and Carbon canister).(add for the broken line in new file)

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207



**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Wed 3/7/2012 6:33:13 PM  
**Subject:** 2011 FE Guide data in Verify attached  
VW Group 2011 FE Guide-all rel dates-no-sales-3-7-2012.xlsx

Richard,

Here you go. I didn't bother to double check for errors and double check the errors that the macro found.

Let me know if you need any other model years.

Also as a heads up---the May 11, 2012 Verify release (Release 10) will have a new transmission type "AMS" for Selectable Automated Manual (e.g. Automated Manual with paddles). Verify will then determine the Transmission as listed in the FE Guide from the number of forward gears. For example, an AMS trans with 6 forward gears will be listed as "Auto (AM-S6)."

You may want to start using it for your 2013 model year vehicles.

Regards

EPA com	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl
Warning - if trans type is Audi	2011	Audi	Audi	A3	ADX	23	2.0 4
Diesel; Warning: derived 5	2011	Volkswage	Audi	A3	VWX	62	2.0 4
	2011	Audi	Audi	A3	ADX	22	2.0 4
	2011	Audi	Audi	A3 QUATTI	ADX	24	2.0 4
	2011	Audi	Audi	A4	ADX	1	2.0 4
	2011	Audi	Audi	A4 AVANT	ADX	5	2.0 4
	2011	Audi	Audi	A4 QUATTI	ADX	3	2.0 4
	2011	Audi	Audi	A4 QUATTI	ADX	7	2.0 4
	2011	Audi	Audi	A5 Cabriole	ADX	2	2.0 4
	2011	Audi	Audi	A5 Cabriole	ADX	6	2.0 4
	2011	Audi	Audi	A5 QUATTI	ADX	4	2.0 4
	2011	Audi	Audi	A5 QUATTI	ADX	8	2.0 4
	2011	Audi	Audi	A6	ADX	16	3.2 6
	2011	Audi	Audi	A6 AVANT	ADX	21	3.0 6
Warning - if trans type is Audi	2011	Audi	Audi	A6 QUATTI	ADX	20	3.0 6
Warning - if trans type is Audi	2011	Audi	Audi	A6 QUATTI	ADX	13	4.2 8
Warning - if trans type is Audi	2011	Audi	Audi	A8	ADX	11	4.2 8
Warning - if trans type is Audi	2011	Audi	Audi	A8L	ADX	10	4.2 8
	2011	Audi	Audi	Q5	ADX	9	2.0 4
	2011	Audi	Audi	Q5	ADX	15	3.2 6
Diesel;	2011	Audi	Audi	Q7	ADX	48	3.0 6
	2011	Audi	Audi	Q7	ADX	43	3.0 6
Warning - if trans type is Audi	2011	Audi	Audi	R8	ADX	73	4.2 8
	2011	Audi	Audi	R8	ADX	75	4.2 8
Warning - if trans type is Audi	2011	Audi	Audi	R8	ADX	28	5.2 10
	2011	Audi	Audi	R8	ADX	30	5.2 10
Warning - if trans type is Audi	2011	Audi	Audi	R8 Spyder	ADX	72	4.2 8
	2011	Audi	Audi	R8 Spyder	ADX	74	4.2 8
Warning - if trans type is Audi	2011	Audi	Audi	R8 Spyder	ADX	27	5.2 10
	2011	Audi	Audi	R8 Spyder	ADX	29	5.2 10
Warning - if trans type is Audi	2011	Audi	Audi	S4	ADX	17	3.0 6
	2011	Audi	Audi	S4	ADX	19	3.0 6
Warning - if trans type is Audi	2011	Audi	Audi	S5	ADX	14	4.2 8
	2011	Audi	Audi	S5	ADX	12	4.2 8
Warning - if trans type is Audi	2011	Audi	Audi	S5 Cabriole	ADX	18	3.0 6
Warning - if trans type is Audi	2011	Audi	Audi	S6	ADX	59	5.2 10
Warning - if trans type is Audi	2011	Audi	Audi	TT COUPE	ADX	25	2.0 4
Warning - if trans type is Audi	2011	Audi	Audi	TT ROADST	ADX	26	2.0 4
Warning - iY	2011	Bentley	Bentley Mc	Continenta	BEX	45	6.0 12
Warning - iY	2011	Bentley	Bentley Mc	Continenta	BEX	44	6.0 12
Warning - iY	2011	Bentley	Bentley Mc	Continenta	BEX	47	6.0 12
Warning - iY	2011	Bentley	Bentley Mc	Continenta	BEX	46	6.0 12
	2011	Bentley	Bentley Mc	Mulsanne	BEX	76	6.8 8
Warning - if trans type is Audi	2011	Bugatti	Bugatti	Veyron	BGT	61	8.0 16

	2011 Lamborghini	Lamborghini Gallardo C	NLX	52	5.2	10
	2011 Lamborghini	Lamborghini Gallardo C	NLX	54	5.2	10
Warning - if trans type is Audi	2011 Lamborghini	Lamborghini Gallardo S	NLX	53	5.2	10
	2011 Lamborghini	Lamborghini Gallardo S	NLX	55	5.2	10
	2011 Volkswage	Volkswage CC	VWX	38	2.0	4
	2011 Audi	Volkswage CC	ADX	57	2.0	4
Warning - if trans type is Audi	2011 Volkswage	Volkswage CC 4MOTI	VWX	60	3.6	6
Warning - if trans type is Audi	2011 Volkswage	Volkswage EOS	VWX	37	2.0	4
	2011 Audi	Volkswage EOS	ADX	58	2.0	4
Diesel; Warning: derived 5	2011 Volkswage	Volkswage GOLF	VWX	63	2.0	4
Diesel; Warning: derived 5	2011 Volkswage	Volkswage GOLF	VWX	66	2.0	4
	2011 Volkswage	Volkswage GOLF	VWX	33	2.5	5
	2011 Volkswage	Volkswage GOLF	VWX	36	2.5	5
Warning - if trans type is Audi	2011 Volkswage	Volkswage GTI	VWX	39	2.0	4
	2011 Audi	Volkswage GTI	ADX	56	2.0	4
Diesel; Warning: derived 5	2011 Volkswage	Volkswage Jetta	VWX	64	2.0	4
	2011 Volkswage	Volkswage Jetta	VWX	50	2.0	4
	2011 Volkswage	Volkswage Jetta	VWX	51	2.0	4
	2011 Volkswage	Volkswage Jetta	VWX		2.0	
	2011 Volkswage	Volkswage Jetta	VWX		2.5	
	2011 Volkswage	Volkswage Jetta	VWX		2.5	
Diesel; Relabeled. Please include in	2011 Volkswage	Volkswage JETTA SPO	VWX	65	2.0	4
Diesel; Warning: derived 5	2011 Volkswage	Volkswage JETTA SPO	VWX	68	2.0	4
	2011 Volkswage	Volkswage JETTA SPO	VWX	31	2.5	5
	2011 Volkswage	Volkswage JETTA SPO	VWX	34	2.5	5
	2011 Volkswage	Volkswage TIGUAN	VWX	41	2.0	4
Relabeled. Please include in	2011 Volkswage	Volkswage TIGUAN	VWX	42	2.0	4
Relabeled. Please include in	2011 Volkswage	Volkswage TIGUAN 4M	VWX	40	2.0	4
Diesel;	2011 Audi	Volkswage TOUAREG	ADX	49	3.0	6
	2011 Volkswage	Volkswage TOUAREG	VWX	69	3.6	6
Duplicate eY	2011 Volkswage	Volkswage Touareg H	VWX	77	3.0	6
Duplicate eY	2011 Volkswage	Volkswage Touareg H	VWX	77	3.0	6

Trans in FE	City FE (G	Hwy FE (C	Comb FE (L	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(S6)	22	28	24				27.0555	38.8824	31.346
Auto(S6)	30	42	34				39.0899	59.4381	46.2085
Manual(M	21	30	24				25.2896	40.4108	30.4102
Auto(S6)	21	28	24				27.2	37.1	30.9119
Auto(AV)	22	30	25				29.2562	42.8122	34.1175
Auto(S8)	21	29	24				26.0226	39.6595	30.7862
Auto(S8)	21	29	24				26.0226	39.6595	30.7862
Manual(M	21	31	25				27.6262	42.4083	32.7656
Auto(AV)	22	30	25				29.2562	42.8122	34.1175
Auto(S8)	21	29	24				26.0226	39.6595	30.7862
Auto(S8)	21	29	24				26.0226	39.6595	30.7862
Manual(M	21	31	25				27.6262	42.4083	32.7656
Auto(AV)	21	30	24				25.1	40.8	30.3566
Auto(S6)	18	26	21				21.8	34.8	26.2052
Auto(S6)	18	26	21				21.8	34.8	26.2052
Auto(S6)	16	24	19				20.1	32.2	24.1906
Auto(S8)	17	27	21				21.1125	35.7222	25.8745
Auto(S8)	17	27	21				21.1125	35.7222	25.8745
Auto(S8)	20	27	22				24.6	35.9	28.6594
Auto(S6)	18	23	20				22.7	30.7	25.7155
Auto(S8)	17	25	20				21.3	37.4	26.4175
Auto(S8)	16	22	18				19.2896	29.8624	22.9453
Auto(AM6	13	21	16				15.9506	26.7678	19.496
Manual(M	11	20	14				13.6465	24.301	17.0007
Auto(AM6	13	19	15				15.331	24.3325	18.3929
Manual(M	12	19	14				13.7	23.0667	16.7632
Auto(AM6	13	21	16				15.9506	26.7678	19.496
Manual(M	11	20	14				13.6465	24.301	17.0007
Auto(AM6	13	19	15				15.331	24.3325	18.3929
Manual(M	12	19	14				13.7	23.0667	16.7632
Auto(S7)	18	28	21				21.6	35	26.096
Manual(M	18	27	21				21.5	34.1	25.7879
Auto(S6)	16	24	19				20.4	31	24.1098
Manual(M	14	22	17				17.3	29.3	21.2088
Auto(S7)	17	26	20				20.3	34	24.7961
Auto(S6)	14	21	16				17.2	26.7	20.4789
Auto(S6)	22	31	26				26.3053	42.1759	35.2694
Auto(S6)	22	31	26				26.3053	42.1759	35.2694
Auto(S6)	18	26	21				21.8	34.8	26.2052
Auto(S6)	11	16	13				13.3989	20.8737	16.6952
Auto(S6)	11	16	13				13.3989	20.8737	16.6952
Auto(S6)	12	19	15				14.3	25.2	17.7561
Auto(S6)	12	19	15				13.9	24.7	17.3049
Auto(S8)	11	18	13				12.7	23.4	15.9903
Auto(S7)	8	15	10				10	17.9	12.4782





13.4655	19.7573	15.718G	NA	Naturally 4AM	Automated	6
12.0883	19.9831	14.7021G	NA	Naturally 4M	Manual	6
13.3954	19.7741	15.6701G	NA	Naturally 4AM	Automated	6
11.5388	19.5451	14.1465G	NA	Naturally 4M	Manual	6
21.8725	31.0314	25.2224	TC	Turbochar 4SA	Semi-Auto	6
21.1346	30.8063	24.6117	TC	Turbochar 4M	Manual	6
16.9415	25.219	19.8774	NA	Naturally 4SA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	Turbochar 4SA	Semi-Auto	6
21.1346	30.8063	24.6117	TC	Turbochar 4M	Manual	6
			TC	Turbochar 4SA	Semi-Auto	6
			TC	Turbochar 4M	Manual	6
23.6601	31.0661	26.5033	NA	Naturally 4SA	Semi-Auto	6
22.7575	32.7434	26.3775	NA	Naturally 4M	Manual	5
24.229	32.5176	27.3682	TC	Turbochar 4SA	Semi-Auto	6
21.1346	30.8063	24.6117	TC	Turbochar 4M	Manual	6
			TC	Turbochar 4SA	Semi-Auto	6
23.0924	29.1439	25.4725	NA	Naturally 4SA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally 4M	Manual	5
			TC	Turbochar 4M	Manual	
			NA	Naturally 4SA	Semi-Auto	
			NA	Naturally 4M	Manual	
.314-08(e)(4) reasons.] Please revise release date to the effective date when vehicles were relabelled; Warning: der						
			TC	Turbochar 4M	Manual	6
23.6601	31.0661	26.5033	NA	Naturally 4SA	Semi-Auto	6
22.7575	32.7434	26.3775	NA	Naturally 4M	Manual	5
19.7627	25.3327	21.9328	TC	Turbochar 4SA	Semi-Auto	6
8(e)(4) reasons.] Please revise release date to the effective date when vehicles were relabelled;						
19.442	24.5299	21.4413	TC	Turbochar 4SA	Semi-Auto	6
8(e)(4) reasons.] Please revise release date to the effective date when vehicles were relabelled;						
19.0707	27.9241	22.2444	TC	Turbochar 4SA	Semi-Auto	8
16.4121	22.8299	18.7889	NA	Naturally 4SA	Semi-Auto	8
in 600.115-08 ref CISC-10-04; Please revise Verify as needed.						
in 600.115-08 ref CISC-10-04; Please revise Verify as needed.						
			SC	Superchar 4SA	Semi-Auto	8
			SC	Superchar 4SA	Semi-Auto	8

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
N	N	F	2-Wheel DBAD	XV02.03UA			GP	Gasoline (F	
Y	N	F	2-Wheel DBVW	XV02.0U5N		5	DU	Diesel, ultr	
N	N	F	2-Wheel DBAD	XV02.03UA			GP	Gasoline (F	
Y	N	A	All Wheel IBAD	XV02.03UA			GP	Gasoline (F	
N	N	F	2-Wheel DBAD	XJ02.03UB			GP	Gasoline (F	
Y	N	A	All Wheel IBAD	XJ02.03UB			GP	Gasoline (F	
Y	N	A	All Wheel IBAD	XJ02.03UB			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XJ02.03UB			GP	Gasoline (F	
N	N	F	2-Wheel DBAD	XJ02.03UB			GP	Gasoline (F	
Y	N	A	All Wheel IBAD	XJ02.03UB			GP	Gasoline (F	
Y	N	A	All Wheel IBAD	XJ02.03UB			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XJ02.03UB			GP	Gasoline (F	
N	N	F	2-Wheel DBAD	XJ03.23UC			GP	Gasoline (F	
Y	N	A	All Wheel IBAD	XV03.03UF			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV03.03UF			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV04.2365			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV04.23UH			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV04.23UH			GP	Gasoline (F	
Y	N	A	All Wheel IBAD	XJ02.0	10		GP	Gasoline (F	
Y	N	A	All Wheel IBAD	XJ03.2	10		GP	Gasoline (F	
Y	N	A	All Wheel IBAD	XT03.03UG		5	DU	Diesel, ultr	
Y	N	A	All Wheel IBAD	XT03.0	10		GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV04.2375			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV04.2375			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV05.2LR8			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV05.2LR8			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV04.2375			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV04.2375			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV05.2LR8			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV05.2LR8			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV03.03UF			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV03.03UF			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV04.2365			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV04.2365			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV03.03UF			GP	Gasoline (F	
N	N	A	All Wheel IBAD	XV05.2385			GP	Gasoline (F	
Please revise release date to the effective date when vehicles were relabelled;							GP	Gasoline (F	
Please revise release date to the effective date when vehicles were relabelled;							GP	Gasoline (F	
Please revise release date to the effective date when vehicles were relabelled; Error-- vehicle is an FFV but maximum e							GP	Gasoline (F	
Please revise release date to the effective date when vehicles were relabelled; Error-- vehicle is an FFV but maximum e							GP	Gasoline (F	
N	N	A	All Wheel IBBE	XV06.0501		310	GP	Gasoline (F	
N	N	A	All Wheel IBBE	XV06.0501		330	GP	Gasoline (I	
N	N	A	All Wheel IBBE	XV06.0501		330	GP	Gasoline (I	
Y	N	R	2-Wheel DBBE	XV06.8	10		GP	Gasoline (F	
N	N	A	All Wheel IBBG	TV08.0V16			GPR	Gasoline (F	



Y	N	A	All Wheel IBAD XV05.2LR8		GP	Gasoline (F
N	N	A	All Wheel IBAD XV05.2LR8		GP	Gasoline (F
N	N	A	All Wheel IBAD XV05.2LR8		GP	Gasoline (F
N	N	A	All Wheel IBAD XV05.2LR8		GP	Gasoline (F
Y	N	F	2-Wheel DBAD XV02.03UA		GP	Gasoline (F
N	N	F	2-Wheel DBAD XV02.03UA		GP	Gasoline (F
N	N	A	All Wheel IBVWXV03.6U46		GP	Gasoline (F
N	N	F	2-Wheel DBVWXV02.03SA		GP	Gasoline (F
N	N	F	2-Wheel DBVWXV02.03SA		GP	Gasoline (F
Y	N	F	2-Wheel DBVWXV02.0U5N	5	DU	Diesel, ultr
N	N	F	2-Wheel DBVWXV02.0U5N	5	DU	Diesel, ultr
Y	N	F	2-Wheel DBVWXV02.5U35		G	Gasoline (F
N	N	F	2-Wheel DBVWXV02.5U35		G	Gasoline (F
N	N	F	2-Wheel DBAD XV02.03UA		GP	Gasoline (F
N	N	F	2-Wheel DBAD XV02.03UA		GP	Gasoline (F
Y	N	F	2-Wheel DBVWXV02.0U5N	5	DU	Diesel, ultr
Y	N	F	2-Wheel DBVWXV02.0MPI		G	Gasoline (F
N	N	F	2-Wheel DBVWXV02.0MPI		G	Gasoline (F
N	N	F	2-Wheel DBVWXV02.0U5N		DU	Diesel, ultr
Y	N	F	2-Wheel DBVWXV02.5U35		G	Gasoline (F
N	N	F	2-Wheel DBVWXV02.5U35		G	Gasoline (F
ived 5 cycle method used -- can only be used if it meets criteria in 5600.115-08 def C1SD-10-04						
N	N	F	2-Wheel DBVWXV02.0U5N	5	DU	Diesel, ultr
Y	N	F	2-Wheel DBVWXV02.5U35		G	Gasoline (F
N	N	F	2-Wheel DBVWXV02.5U35		G	Gasoline (F
Y	N	F	2-Wheel DBAD XV02.03UA		GP	Gasoline (F
N	N	F	2-Wheel DBAD XV02.03UA		GP	Gasoline (F
Y	N	A	All Wheel IBAD XV02.0	10	GP	Gasoline (F
Y	N	A	All Wheel IBAD XT03.02UG	5	DU	Diesel, ultr
Y	N	A	All Wheel IBVWXT03.6U76		GP	Gasoline (F
Y	N	A	All Wheel IBVWXT03.0HEV		GP	Gasoline (I
Y	N	A	All Wheel IBVWXT03.0HEV		GP	Gasoline (I



Mileage (15 ppm) (exempt)	Not exempt				
Mileage (15 ppm) (exempt)	Not exempt				
Mileage (15 ppm) (exempt)	Not exempt				
Mileage (15 ppm) (exempt)	Not exempt				
Mileage (15 ppm) (exempt)	Not exempt			94	13
Mileage (15 ppm) (exempt)	Not exempt			94	13
Mileage (15 ppm) (exempt)	Not exempt			94	13
Mileage (15 ppm) (exempt)	Not exempt	77	11		
Mileage (15 ppm) (exempt)	Not exempt	77	11		
Mileage (15 ppm) (exempt)	Not exempt				94 15
Mileage (15 ppm) (exempt)	Not exempt				94 15
Mileage (15 ppm) (exempt)	Not exempt				94 15
Mileage (15 ppm) (exempt)	Not exempt				94 15
Mileage (15 ppm) (exempt)	Not exempt				94 15
Mileage (15 ppm) (exempt)	Not exempt				94 15
Mileage (15 ppm) (exempt)	Not exempt			94	16
Mileage (15 ppm) (exempt)	Not exempt			94	16
Mileage (15 ppm) (exempt)	Not exempt			94	16
Mileage (15 ppm) (exempt)	Not exempt				15
Mileage (15 ppm) (exempt)	Not exempt				15
Mileage (15 ppm) (exempt)	Not exempt				15
Mileage (15 ppm) (exempt)	Not exempt			92	33
Mileage (15 ppm) (exempt)	Not exempt			92	33
Mileage (15 ppm) (exempt)	Not exempt			92	33
Mileage (15 ppm) (exempt)	Not exempt			92	33
Mileage (15 ppm) (exempt)	Truck				
Mileage (15 ppm) (exempt)	Truck				
Mileage (15 ppm) (exempt)	Truck				
Mileage (15 ppm) (exempt)	Truck				
Mileage (15 ppm) (exempt)	Truck				
Mileage (15 ppm) (exempt)	Truck				
Mileage (15 ppm) (exempt)	Truck				
Mileage (15 ppm) (exempt)	Truck				

Annual Fuel	EPA Calc	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadjusted
2002		2002 ...2011 fuel unit prices used for annual fuel cost	
1367		1367 2011 unit fuel price update.....UPDATED	
2002		2002 2011 fuel unit prices used for annual fuel cost	
2002		2002trans lockup to yes.....2011 fuel unit prices used for annual fuel cost	
1920		1920 five cycle configuration calculation corrected to four places.....2011 FUEL UNIT PRICE ADJUSTMENT	
2002		2002 five cycle configuration calculation corrected to four places.....trans lockup to yes.....2011	
2002		2002 SALES VOLUME CORRECTION.....five cycle configuration calculation corrected to four p	
1920		1920 five cycle configuration calculation corrected to four places.....2011 FUEL UNIT PRICE ADJUSTMENT	
1920		1920 five cycle configuration calculation corrected to four places.....2011 FUEL UNIT PRICE ADJUSTMENT	
2002		2002 five cycle configuration calculation corrected to four places.....trans lockup to yes.....2011 FUEL	
2002		2002 five cycle configuration calculation corrected to four places.....trans lockup to yes.....2011	
1920		1920 five cycle configuration calculation corrected to four places, correct rounded highway numb	
2002		2002 FOUR PLACES FOR 5-CYCLE CALCULATION.....2011 FUEL UNIT PRICE ADJUSTMENT	
2285		2285 four places for 5-cycle calculation.....trans lockup to yes.....2011 FUEL UNIT PRICE ADJUSTMENT	
2285		2285 ADDED SUBCONFIGURATION INFO FOR A6 AVANT QUATTRO...four places for 5-cycle calculat	
2525		2525 WORSE CASE COLD CO AND SC03 DATA FROM A8L AND SUBSTITUTED FOR A6 QUATTRO 5-CY	
2285		2285 A8 (NWB) CONFIGURATION DATA ADDED, SC03 AND COLD CO TESTS FROM A8L SUBSTITUTED	
2285		2285 ADDED NORMAL WHEEL BASE CONFIGURATION DATA TO BASE LEVEL CALCULATION...COLD C	
2184		2184 changed lock-up to yes for CAFE fine tune	
2400		2400 fine tune for CAFE, lock-up to Yes	
2325		2325 2011 unit fuel price used for annual fuel cost.....corrected EPA test results used at 37.4 MPG	
2669		2669 fine tune for CAFE	
3000		3000	
3427		3427	
3202		3202 2011 unit fuel price for annual fuel cost	
3427		3427 2011 unit fuel price for annual fuel cost	
3000		3000	
3427		3427	
3202		3202 2011 unit fuel price for annual fuel cost	
3427		3427 2011 unit fuel price for annual fuel cost	
2285		2285 five cycle calculation now to four places.....2011 fuel unit prices used for annual fuel cost..	
2285		2285 five cycle calculation to four places.....2011 fuel unit prices used for annual fuel cost...driv	
2525		2525 FIVE CYCLE CALULATION TO FOUR PLACES...2011 fuel unit prices used for annual fuel cost...dr	
2822		2822 four place 5-cycle calculation.....2011 fuel unit prices used for annual fuel cost...drive train c	
2400		2400 five cycle calculation to four places.....2011 fuel unit prices used for annual fuel cost....dri	
3000		3000 used ADFE for SC03 and Cold CO test data, basis is S8....2011 fuel unit price used for annual fu	
1848		1848 2011 fuel unit prices used for annual fuel cost.....relabel after new test group certification	
1848		1848 2011 fuel unit prices used for annual fuel cost.....relabel after certification of new test group	
3691		3691 FULL 5-CY8 13 9 9.4404	
3691		3691 FULL 5-CY8 13 9 9.4404	
3427		3427 FULL 5-CY8 14 10 10.3	
3427		3427 FULL 5-CY8 14 10 10.3	
3691		3691 lock-up torque converter corrected to yes	
4800		4800 fuel unit price updated for annual fuel cost....corrected final axle ratio...corrected drive system	

3000	3000 BASE LEVEL 5 CYCLE DATA CORRECTED.....fuel unit price updated for annual fuel cost.....cor
3202	3202 fuel unit price updated for annual fuel cost
3000	3000 fuel unit price updated for annual fuel cost.....corrected city and combined 5-cycle values
3427	3427 fuel unit price updated for annual fuel cost
1920	1920 TEST NUMBERS CORRECTED.....trans lockup to yes.....2011 fuel unit prices used, CORRECTED
1920	1920 2011 fuel unit prices used.....corrected config test group names and mauf/division codes
2400	2400 2011 unit fuel price used for annual fuel cost, corrected final drive to 3.45, axle ratio times pr
1920	1920 2011 fuel unit prices used
1920	1920 2011 fuel unit prices used
1367	1367 2011 unit fuel price update.....UPDATED
1367	1367 corrected Golf test numbers.....new diesel fuel unit price \$3.10 used for annual fuel cost
1665	1665 corrected 5-cycle label values and annual fuel cost.....trans lockup to yes..2011 unit fuel pric
1732	1732 2011 unit fuel prices used
1776	1776 2011 fuel unit price used
1920	1920 2011 fuel unit prices used
1367	1367 2011 unit fuel price update.....UPDATED
1800	1800 trans lockup to yes.....2011 unit fuel price used for annual fuel cost, input with EPA confirmat
1606	1606 2011 unit fuel price used for annual fuel cost
1367	1367 corrected Golf test numbers.....new diesel fuel unit price \$3.10 used for annual fuel cost
1665	1665 corrected 5-cycle label and annual fuel cost.....trans lockup to yes....2011 unit fuel prices use
1732	1732 2011 unit fuel prices used
1409	1409 2011 unit fuel price update.....RELABEL WITH WORSE CASE SPORTWAGEN DATA and ADD
1367	1367 corrected Golf test numbers.....new diesel fuel unit price \$3.10 used for annual fuel cost
1665	1665 corrected 5-cycle results and annual fuel cost.....trans lockup to yes....2011 unit fuel prices us
1732	1732 2011 unit fuel prices used
2184	2184 trans lockup to yes.....2011 unit fuel price used for annual fuel cost
2285	2285 2011 unit fuel price used for annual fuel cost.....relabelled with EPA confirmatory tests for F
2285	2285 lockup to yes, logged on as VW
2116	2116 2011 unit fuel price used for annual fuel cost...fuel corrected to Ultra Low Sulfur Diesel Fuel...
2525	2525
2285	2285 Change to derived 5-cycle calculation method values
2285	2285 Change to derived 5-cycle calculation method values

STMENT

FUEL UNIT PRICE ADJUSTMENT....drive train changed to AWD...corrected 5-cycle and derived 5-cycle values  
laces...trans lockup to yes.....2011 FUEL UNIT PRICE ADJUSTMENT..drive train changed to AWD, corrected derive  
STMENT....drive train changed to AWD

STMENT

L UNIT PRICE ADJUSTMENT...drive train changed to AWD...corrected 5-cycle and derived 5-cycle values

FUEL UNIT PRICE ADJUSTMENT....drive train changed to AWD...corrected 5-cycle and derived 5-cycle values  
er from 32 to 31.....2011 FUEL UNIT PRICE ADJUSTMENT...drive train changed to AWD

STMENT.....drive train changed to AWD...corrected Hwy and combined 5-cycle values

ion.....2011 FUEL UNIT PRICE ADJUSTMENT....drive train changed to AWD...corrected Hwy and Combined 5-cycle v  
CLE CALCULATION....5-cycle configuration data calculated to four places...changed to use ADFE for SC03 and Cold C  
FOR THIS FIVE CYCLE CONFIGURATION....5-cycle configuration data to four places....2011 fuel unit prices used for a  
O AND SC03 SUBSTITUTED FOR A8 FROM A8L....5-cycle configuration data to four places...2011 fuel unit prices use

for 5-cycle calculator

```
.drive train changed to AWD
```

e train changed to AWD

ive train changed to AWD

hanged to AWD

ve train changed to AWD

el cost, changed drive train to AWD

H6E9389.....1E7688	7020E/SUBST.57031ON.4698	245E	ENGINE	CODE ECKH-Q621MP	Substituted for C
H6E9389.....1E7688	7020E/SUBST.57031ON.4698	240	ENGINE	CODE ECKH-Q621MP	Substituted for C
H7E70.....1E7668	6C15E/SUBST.028TION.0502	240	ENGINE	CODE ECKH-Q621MP	Substituted for C
H7E70.....1E7668	6C30E/SUBST.53841ON.0502	245E	ENGINE	CODE ECKH-Q621MP	Substituted for C

to all-wheel-drive

rect 5-cycle values due to FTP 3rd bag rounding error, from 19.7 to 19.6 (19.65)

PZEV TEST GROUPT TEST NUMBERS...changed config 1 with Audi test group to read ADX and division 2 for CC  
e stage

es used..EPA confirmatory tests used for Sportwagen.....corrected city achievement range

ory tests, not relabel but updated with EPA test numbers

d..EPA confirmatory tests used for Sportwagen.....corrected city achievement range

ED 5-CYCLE TESTS FOR LITMUS TEST FOR TEST GROUP; BVWXV02.0U5N

ed....EPA confirmatory tests SportWagen used..city achievement range corrected

TP, HWY and US06 for 5-cycle method label

..manuf confirmatory tests now used for 5-cycle calculation





SIDI; SIDI;	2	21	Two Seate car	Vehicle Specific 5-cycle label
SIDI; SIDI;	2	21	Two Seate car	Vehicle Specific 5-cycle label
SIDI; SIDI;	2	21	Two Seate car	Vehicle Specific 5-cycle label
SIDI; SIDI;	2	21	Two Seate car	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI; SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI; SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
SIDI; SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	1	14	Compact Ccar	Vehicle Specific 5-cycle label
	1	14	Compact Ccar	Vehicle Specific 5-cycle label
		4	Compact Ccar	Derived 5-cycle label
		4	Compact Ccar	Vehicle Specific 5-cycle label
		4	Compact Ccar	Vehicle Specific 5-cycle label
Under EPA	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
SIDI;	2	222	Special Pur <sup>1</sup>	Vehicle Specific 5-cycle label
SIDI; Unde	2	222	Special Pur <sup>1</sup>	Vehicle Specific 5-cycle label
SIDI; Unde	2	223	Special Pur <sup>1</sup>	Vehicle Specific 5-cycle label
	2	223	Special Pur <sup>1</sup>	Vehicle Specific 5-cycle label
SIDI; SIDI;	2	223	Special Pur <sup>1</sup>	Vehicle Specific 5-cycle label
SIDI;	2	223	Special Pu <sup>1</sup>	Derived 5-cycle label
	2	223	Special Pu <sup>1</sup>	Derived 5-cycle label

Release Date	EPA FE Label Dataset	Trunk Due La	Label Rec Relabel	Relabel Dr	Suppress	Police/Em	Comment
8/27/2010	4504	N	N		N	N	ENGINE CC
8/27/2010	5603	N	N		N	N	
8/27/2010	4503	N	N		N	N	ENGINE CC
8/27/2010	4505	N	N		N	N	ENGINE CC
8/27/2010	4486	N	N		N	N	
8/27/2010	5419	N	N		N	N	
8/27/2010	5417	N	N		N	N	
8/27/2010	4527	N	N		N	N	
8/27/2010	4487	N	N		N	N	
8/27/2010	5420	N	N		N	N	
8/27/2010	5418	N	N		N	N	
8/27/2010	4528	N	N		N	N	
8/27/2010	4494	N	N		N	N	
8/27/2010	5424	N	N		N	N	
8/27/2010	5423	N	N		N	N	
8/27/2010	4579	N	N		N	N	
8/27/2010	4578	N	N		N	N	
8/27/2010	5422	N	N		N	N	
8/27/2010	9313	N	N		N	N	
8/27/2010	9320	N	N		N	N	
8/27/2010	5427	N	N		N	N	
8/27/2010	9321	N	N		N	N	
10/4/2010	5560	N	N		N	N	
10/4/2010	5562	N	N		N	N	
8/27/2010	4509	N	N		N	N	ENGINE CC
8/27/2010	4511	N	N		N	N	ENGINE CC
10/4/2010	5559	N	N		N	N	
10/4/2010	5561	N	N		N	N	
8/27/2010	4508	N	N		N	N	ENGINE CC
8/27/2010	4510	N	N		N	N	ENGINE CC
8/27/2010	4533	N	N		N	N	
8/27/2010	4535	N	N		N	N	
8/27/2010	4531	N	N		N	N	
8/27/2010	4530	N	N		N	N	
8/27/2010	4534	N	N		N	N	
8/27/2010	4580	N	N		N	N	
/2010/Pr 2010 values were XX MPG city, XX MPG highway, and XX MPG combined;	5495			Relabel		N	ENGINE CC
/2010/Pr 2010 values were XX MPG city, XX MPG highway, and XX MPG combined;	5495			Relabel		N	ENGINE CC
PRIMECITYLINE REF F330X CODED DRIVING RANGE F33 AND GASOLINE...2011 fuel unit prices used, C	5388	N	N	Relabel		N	Continental
PRIMECITYLINE REF F330X CODED DRIVING RANGE F33 AND GASOLINE...2011 fuel unit prices used, C	5388	N	N	Relabel		N	Continental
R E85 AND GASOLINE...2011 unit fuel prices used for annual fuel costs.....corrected axle ratio, corrected base level	5414	N	N		N	N	Continental
IFOR 8/25/2010 GASOLINE...2011 unit fuel prices used.....corrected axle ratio, corrected gasoline base level fuel	5405	N	N		N	N	Continental
11/1/2010	8249	N	N		N	N	
8/27/2010	5498	N	N		N	N	CHARGE AI

8/27/2010	5415		N	N	N	N	ENGINE CC
8/27/2010	4474		N	N	N	N	ENGINE CC
8/27/2010	5416		N	N	N	N	ENGINE CC
8/27/2010	4475		N	N	N	N	ENGINE CC
8/27/2010	5552		N	N	N	N	ENGINE CC
8/27/2010	5553		N	N	N	N	ENGINE CC
8/27/2010	5595		N	N	N	N	
8/27/2010	4572		N	N	N	N	
8/27/2010	4571		N	N	N	N	
8/27/2010	5604		N	N	N	N	
8/27/2010	4477		N	N	N	N	
8/27/2010	5528		N	N	N	N	
8/27/2010	4586		N	N	N	N	
8/27/2010	4574		N	N	N	N	ENGINE CC
8/27/2010	4570		N	N	N	N	ENGINE CC
8/27/2010	5605		N	N	N	N	
9/20/2010	5804		N	N	N	N	
8/27/2010	4521		N	N	N	N	
8/27/2010			N	N	N	N	
8/27/2010			N	N	N	N	
8/27/2010			N	N	N	N	
. Previous values were XX MPG city, XX MPG highway, and XX MPG combined; Relabel 12							
8/27/2010	4479		N	N	N	N	
8/27/2010	5527		N	N	N	N	
8/27/2010	4584		N	N	N	N	
8/27/2010	4518		N	N	N	N	ENGINE CC
010. Previous values were XX MPG city, XX MPG highway, and XX MPG combined; Relabel 12							
8/27/2010	5432		N	N	N	N	ENGINE CC
/2010. Previous values were XX MPG city, XX MPG highway, and XX MPG combined; Relabel 12							
8/27/2010	5428		N	N	N	N	
8/31/2010	4986		N	N	N	N	
12/7/2010	5720		N	N	N	N	V6 CYLIND
12/7/2010	5720		N	N	N	N	V6 CYLIND



BUJ (AUDI R8)	Y	INLET ANDN
BUJ (AUDI R8)	Y	INLET ANDN
BUJ (AUDI R8)	Y	INLET ANDN
BUJ (AUDI R8)	Y	INLET ANDN
CCTA ONLY.	Y	CONTINU CN
CCTA ONLY.	Y	CONTINU CN
N	Y	INTAKE/EXN
N	Y	CONTINU CN
N	Y	CONTINU CN
N	N	N
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
CCTA ONLY.	Y	CONTINU CN
CCTA ONLY.	Y	CONTINU CN
N	N	N
N	N	N
N	N	N
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
N	N	N
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
CCTA ONLY.	Y	CONTINU CN
CCTA ONLY.	Y	CONTINU CN
CCTA ONLY.	Y	CONTINU CN
N	N	N
N	Y	INTAKE/EXN
2 BANK SYSTEM	Y	MECANIC,N
2 BANK SYSTEM	Y	MECANIC,N

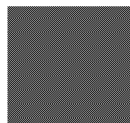
Battery(s)  
Battery(s)

1 NiMH  
1 NiMH

Battery Ty	Total Volt	Batt Enerç	Batt Spec	Batt Charç	Comment	# Capacit	Regen Br	Regen Br	Regen Br
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. No change in valve overlaps.  
nd Veyron Grand Sport.

TING ROTATION ANGLE



STS ROTATION ANGLE

288	6	21.5On-Board	Other	BRAKE PEBoth
288	6	21.5On-Board	Other	BRAKE PEBoth

Power Source (Front, Rear, Both) Fuel Cell (HEV-EV C# Drive Motor Ger Motor Ger Rated Motor Fuel Meter

Direct Dies

Spark Ignit

Spark Ignit

Spark Ignit

Spark Ignit

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Spark Ignit

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Direct Dies

Spark Ignit

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Spark Ignit

Spark Ignit

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Spark Ignit

Multipoint

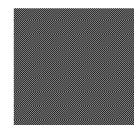
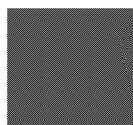
Multipoint



Spark Ignit  
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Direct Dies  
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Multipoint

Direct Dies



Direct Dies  
Multipoint  
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Direct Dies  
Direct Dies  
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Multipoint

Direct Dies  
Spark Ignit

✓REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM	Other	3 PHASE C	34
✓REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM	Other	3 PHASE C	34

W41 Desc	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell V	Off Board	Camless V	Oil Viscosi	Eng Mgmt	Eng Mgmt	Trans in FE
	GDI	Spark Ignit			N	5W40	N	No	Auto(S6)	
tion (non-common rail)	Direct Dies	N					N	No	Auto(S6)	
	GDI	Spark Ignit			N	5W40	N	No	Manual(M	
	GDI	Spark Ignit			N	5W40	N	No	Auto(S6)	
ect fuel injection	Spark Ignit	N					N	No	Auto(AV)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S8)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S8)	
ect fuel injection	Spark Ignit	N					N	No	Manual(M	
ect fuel injection	Spark Ignit	N					N	No	Auto(AV)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S8)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S8)	
ect fuel injection	Spark Ignit	N					N	No	Manual(M	
ect fuel injection	Spark Ignit	N					N	No	Auto(AV)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S6)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S6)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S6)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S8)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S8)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S8)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S6)	
tion (non-common rail)	Direct Dies	N					N	No	Auto(S8)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S8)	
ect fuel injection	Spark Ignit	N					N	No	Auto(AM6	
ect fuel injection	Spark Ignit	N					N	No	Manual(M	
ect fuel injection	Spark Ignit	N					N	No	Auto(AM6	
ect fuel injection	Spark Ignit	N					N	No	Manual(M	
ect fuel injection	Spark Ignit	N					N	No	Auto(AM6	
ect fuel injection	Spark Ignit	N					N	No	Manual(M	
ect fuel injection	Spark Ignit	N					N	No	Auto(AM6	
ect fuel injection	Spark Ignit	N					N	No	Manual(M	
ect fuel injection	Spark Ignit	N					N	No	Auto(S7)	
ect fuel injection	Spark Ignit	N					N	No	Manual(M	
ect fuel injection	Spark Ignit	N					N	No	Auto(S6)	
ect fuel injection	Spark Ignit	N					N	No	Manual(M	
ect fuel injection	Spark Ignit	N					N	No	Auto(S7)	
ect fuel injection	Spark Ignit	N					N	No	Auto(S6)	
	GDI	Spark Ignit			N	5W40	N	No	Auto(S6)	
	GDI	Spark Ignit			N	5W40	N	No	Auto(S6)	
	MFI	Multipoint/N			N	5W30 VW	N	No	Auto(S6)	
	MFI	Multipoint/N			N	5W30 VW	N	No	Auto(S6)	
	MFI	Multipoint/N			N	5W30 VW	N	No	Auto(S6)	
	MFI	Multipoint/N			N	5W30 VW	N	No	Auto(S6)	
ntial fuel injection	Multipoint	N					N	No	Auto(S8)	
ntial fuel injection	Multipoint	N					N	No	Auto(S7)	

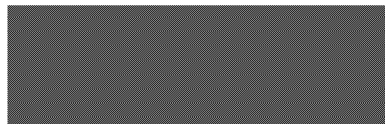
ect fuel injection	Spark Ignit	N		N	No	Auto(AM6
ect fuel injection	Spark Ignit	N		N	No	Manual(M
ect fuel injection	Spark Ignit	N		N	No	Auto(AM6
ect fuel injection	Spark Ignit	N		N	No	Manual(M
GDI	Spark Ignit	N	5W40	N	No	Auto(S6)
GDI	Spark Ignit	N	5W40	N	No	Manual(M
ect fuel injection	Spark Ignit	N		N	No	Auto(S6)
ect fuel injection	Spark Ignit	N		N	No	Auto(S6)
ect fuel injection	Spark Ignit	N		N	No	Manual(M
tion (non-common rail)	Direct Dies	N		N	No	Auto(S6)
tion (non-common rail)	Direct Dies	N		N	No	Manual(M
ntial fuel injection	Multipoint	N		N	No	Auto(S6)
ntial fuel injection	Multipoint	N		N	No	Manual(M
GDI	Spark Ignit	N	5W40	N	No	Auto(S6)
GDI	Spark Ignit	N	5W40	N	No	Manual(M
tion (non-common rail)	Direct Dies	N		N	No	Auto(S6)
MFI	Multipoint	N	10W-40	N	No	Auto(S6)
MFI	Multipoint	N	10W-40	N	No	Manual(M
tion (non-common rail)	Direct Dies	N		N	No	Manual(M
ntial fuel injection	Multipoint	N		N	No	Auto(S6)
ntial fuel injection	Multipoint	N		N	No	Manual(M
tion (non-common rail)	Direct Dies	N		N	No	Auto(S6)
tion (non-common rail)	Direct Dies	N		N	No	Manual(M
ntial fuel injection	Multipoint	N		N	No	Auto(S6)
ntial fuel injection	Multipoint	N		N	No	Manual(M
GDI	Spark Ignit	N	5W40	N	No	Auto(S6)
GDI	Spark Ignit	N	5W40	N	No	Manual(M
GDI	Spark Ignit	N	5W40	N	No	Auto(S6)
tion (non-common rail)	Direct Dies	N		N	No	Auto(S8)
ect fuel injection	Spark Ignit	N		N	No	Auto(S8)
GDI	Spark Ignit	N	N	5W40 VW	No	Auto(S8)
		N	N	5W40 VW	No	Auto(S8)

2017-FFP\_003143

Auto(AM6)  
Manual(M6  
Auto(AM6)  
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Auto(S8)  
Auto(S8)



27.9

**MPGzler Indicator (Contact P Mfr Contact (Rel 8)**

[illegible]

Mr. Richard E Thomas Jr.

Mr. Richard E Thomas Jr.

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Mr. Richard E Thomas Jr.

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RICHARD I Richard.Ih 248 754 44 Mr. Richard E Thomas Jr.

d E Thomas Jr.





[REDACTED]



[REDACTED]

**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**From:** "Harris, Dale"  
**Sent:** Thur 3/8/2012 3:22:23 PM  
**Subject:** RE: GHG Early Credit Report - Question (VWGoA)  
[@vw.com](mailto:Leonard.Kata@vw.com)  
<http://www.volkswagengroupamerica.com/>  
[@vw.com](mailto:Leonard.Kata@vw.com)  
<http://www.volkswagengroupamerica.com/>

Dave

This is a follow up note. Still looking feedback on the questions identified below. Thanks!!

Regards,

Dale Harris

Certification Specialist

VOLKSWAGEN Group of America, Inc.

Engineering and Environmental Office (EEO)  
3800 Hamlin

AuburnHills Michigan 48326

United States of America

P: +1 248 754-4218

E: Dale.Harris@vw.com

<http://www.volkswagengroupamerica.com/>

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From: Harris, Dale  
Sent: Friday, March 02, 2012 1:29 PM  
To: Dave Good  
Cc: Kata, Leonard  
Subject: GHG Early Credit Report - Question (VWGoA)

Dave

Hello!!

I am Dale Harris Certification Specialist reporting to Len Kata at VWGoA. I am preparing the GHG Early Credit Report for submission and need clarity/direction on a couple of issues.

1. I am using the 'Banking & Trading Summary Table' provided via the EPA GHG site for the Early Credit Report. Is this the appropriate template??

2. I have modified the template to include multiple car and truck rows to enable pathway 3 calculations to appear appropriately. Is it ok to modify the template??

In addition I have attached a draft version of the report that will enable you to provide responses to the questions above. Thanks!!!

Regards,

Dale Harris

Certification Specialist

VOLKSWAGEN Group of America, Inc.

Engineering and Environmental Office (EEO)  
3800 Hamlin

AuburnHills Michigan 48326

United States of America

P: +1 248 754-4218

E: Dale.Harris@vw.com

<http://www.volkswagengroupamerica.com/>

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**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Thur 3/8/2012 3:25:08 PM  
**Subject:** RE: R104RXX-0077 (2009 Audi/A5)

Hello Lynn,

Sorry to get back to you so late.

Thank you very much for the contact data. We will contact both customers as soon as possible and send the vehicles to our test facility in California.  
I will keep you updated on our analysis.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Wednesday, February 29, 2012 10:00 AM  
To: Berenz, Sebastian  
Subject: Fw: R104RXX-0077 (2009 Audi/A5)

Hi, Sebastian.

I got a call from [Ex. 6] this morning. He is very enthusiastic about having Audi test his vehicle. He will be going to Germany this summer and wants to make sure that the car is running as it should.

He asked for your phone number because he is interested in starting this process as soon as possible. He also asked for me to forward his e-mail to you: [Ex. 6]

Please let me know if you'd like me to forward your number to him.

Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

----- Forwarded by Lynn Sohacki/AA/USEPA/US on 02/29/2012 09:55 AM -----

From: Lynn Sohacki/AA/USEPA/US  
To: Sebastian.Berenz@vw.com  
Date: 02/28/2012 04:20 PM  
Subject: Fw: R104RXX-0077 (2009 Audi/A5)

Hi, Sebastian.

The owner's name for the above vehicle is [Ex. 6] and his phone number is [Ex. 6]. He can be reached between the hours of 08:00-18:00.

I will be contacting the other owner shortly.

Regards.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Thur 3/8/2012 4:51:12 PM  
**Subject:** VW Group - 2013 Audi Certification Requests  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I have submitted Initial Applications and Certification requests for the following 2013 Audi test groups.

The test group DADXV02.03UA is a new LDV test group for 2013 and uses carry-across data from the 2012 LDV/LDT test group CADXJ02.03UA. This new 2013 test group no longer includes VW Tiguan (LDT1) models and some other VW models now being certified in Volkswagen test groups for 2013.

All other test groups listed are direct carry-overs from 2012.

DADXT03.0TLF – T2B5/ULEV carry-over

DADXV02.03PA – T2B3/SULEV carry-over

DADXV02.03UA – T2B5/ULEV new

All of these have normal start of production dates in week 22/2012, so no rush is necessary.

Please let me know if you have questions.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Sandra Somoza/OU=AA/O=USEPA/C=US  
**Sent:** Thur 3/8/2012 5:30:20 PM  
**Subject:** Re: VW Group: Investigation into Possible Manufacturer Profile Changes in Verify  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Robert,

I am forwarding your question to your certification rep Jim Snyder.

Sandra Somoza  
U.S. Environmental Protection Agency  
Office of Transportation and Air Quality  
Compliance Division  
734 214-4704  
[somoza.sandra@epa.gov](mailto:somoza.sandra@epa.gov)

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
To: Sandra Somoza/AA/USEPA/US@EPA  
Cc: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
Date: 03/08/2012 11:52 AM  
Subject: VW Group: Investigation into Possible Manufacturer Profile Changes in Verify

Hello Sandra,

The Volkswagen Group is investigating the possibility of some changes in how it is listed in the Verify System.

Bob Peavyhouse made a suggestion to Richard Thomas that has the potential to considerably simplify the our submission processing for CAFE and GHG.

This is only a preliminary investigation and we are not sure that we can even do it for reasons we have yet to discover.

Currently the Volkswagen Group consists of Volkswagen, Audi, Bentley, Lamborghini and Bugatti. Each of these manufacturers exist in Verify as a separate manufacturer with it's own login.

We are investigating the possibility of combining some or all of the five manufacturers under one entity – similar to other manufacturers (GM, Ford, Toyota, etc.) with more than one make.

This would, in theory, reduce the magnitude of permissions we have to set up and any number of other things in Verify in order to share data between all five manufacturers.

We need to know if it is possible to set up a single manufacturer group in Verify using manufacturers that already exist in Verify as individual manufacturers.

We also need to know what the ramifications of doing that would be. Would that, for instance, change the manufacturer name on the certificates of conformity?

Is it possible to keep the individual manufacturer names on the related certificates of conformity? Any other things to consider?

If this is even possible, we will have to get agreement from each of the affected manufacturers before we can move ahead with it.

For now we are trying to get answers to the questions we know they will ask.

Any insight that you can provide will be greatly appreciated.

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com

**To:** Robert.Hart@vw.com[]  
**Cc:** CN=Sandra Somoza/OU=AA/O=USEPA/C=US@EPA;CN=Christi Poirier/OU=AA/O=USEPA/C=US@EPA;CN=Karen Danzeisen/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;richard.thomas@vw.com[]; N=Christi Poirier/OU=AA/O=USEPA/C=US@EPA;CN=Karen Danzeisen/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;richard.thomas@vw.com[]; N=Karen Danzeisen/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;richard.thomas@vw.com[]; N=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;richard.thomas@vw.com[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;richard.thomas@vw.com[]; ichard.thomas@vw.com[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 3/8/2012 9:35:20 PM  
**Subject:** VW Group: Transmission Lockup Choices in Verify  
[robert.hart@vw.com](mailto:robert.hart@vw.com)  
(embedded image)  
(embedded image)  
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Bob H,

Bob, Peavyhouse says that the transmission lockup data entry for Test Group, VI,, FE Label and CAFE transmission fields must be consistent. We are not aware of any business rules which require a "yes" or "no" in the Transmission lockup fields for a certain type of transmission,.

Also, as we discussed today, the EPA Verify "automated manual" transmission type is meant to include the VW dual-clutch transmission and the VW type of automated manual transmission which doesn't have dual clutches. As a "heads up," the May 11, 2012 Verify release (Release 10) we will have a new transmission type "AMS" for Selectable Automated Manual transmissions (e.g. Automated Manual with paddles or with a tiptronic gear selector). Verify will then determine the "Transmission as listed in the FE Guide" field from the transmission type (AMS) and the number of forward gears. For example, an AMS trans with 6 forward gears will be listed in the FE Guide as "Auto (AM-S6)."

For automated manual transmissions, I'd recommend that after May 11, 2012, VW begin using this new field for 2013 model year vehicles and enter "yes" for transmission lock-up for those transmissions. The transmission lock-up field was not meant to mean lockup torque converter (as may have been the case in some of the old CFEIS instructions). See Bob Peavyhouse's attached email. Verify data elements field VI-38 is correct---the description for that field doesn't mention the torque converter. Verify data elements fields GL-69 and TG-309 need to be corrected---the description for those fields mentions a locking torque converter.

The good news is that the Verify front-end data input headings are correct---they don't mention "torque converter." See Bob P's email, below.

Dave

----- Forwarded by David Good/AA/USEPA/US on 03/08/2012 04:09 PM -----

From: Robert Peavyhouse/AA/USEPA/US  
To: David Good/AA/USEPA/US@EPA  
Date: 03/08/2012 01:27 PM  
Subject: Transmission Lockup (does NOT say Torque Converter)

Dave,  
Our front-end screens do not say "Torque Converter" Lockup, they all say "Transmission Lockup".  
All dual clutch transmissions would be Transmission Lockup = Yes.  
This is in the Test Group Dataset under Certified Models

This is in Vehicle Information Dataset

This is in the Label Dataset

Robert Peavyhouse  
Compliance Division  
U.S. EPA - Office of Transportation and Air Quality  
phone: (734) 214-4814  
fax: (734) 214-4053  
email: peavyhouse.robert@epa.gov  
website: <http://www.epa.gov/nvfel/>

From: Stephen Healy/AA/USEPA/US  
To: Sandra Somoza/AA/USEPA/US@EPA, David Good/AA/USEPA/US@EPA  
Cc: Christi Poirier/AA/USEPA/US@EPA, Karen Danzeisen/AA/USEPA/US@EPA, Robert Peavyhouse/AA/USEPA/US@EPA  
Date: 03/08/2012 12:51 PM  
Subject: Re: Fw: VW Group: Transmission Choices in Verify

This has an impact on the Fuel Economy Guide, so I would recommend Dave Good respond.  
Steve

From: Sandra Somoza/AA/USEPA/US  
To: Stephen Healy/AA/USEPA/US@EPA, Robert Peavyhouse/AA/USEPA/US@EPA, Karen Danzeisen/AA/USEPA/US@EPA, Christi Poirier/AA/USEPA/US@EPA  
Date: 03/08/2012 11:06 AM  
Subject: Fw: VW Group: Transmission Choices in Verify

Steve,

Can you look into this and let me know how we should proceed? Thanks

Sandra Somoza

U.S. Environmental Protection Agency  
Office of Transportation and Air Quality  
Compliance Division  
734 214-4704  
somoza.sandra@epa.gov

----- Forwarded by Sandra Somoza/AA/USEPA/US on 03/08/2012 11:05 AM -----

From: Sandra Somoza/AA/USEPA/US  
To: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>, verifyhelp@csc.com  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 03/08/2012 11:05 AM  
Subject: Re: VW Group: Transmission Choices in Verify

I am forwarding your request to the help desk.

Sandra Somoza

U.S. Environmental Protection Agency  
Office of Transportation and Air Quality  
Compliance Division  
734 214-4704  
somoza.sandra@epa.gov

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
To: Sandra Somoza/AA/USEPA/US@EPA  
Cc: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Giles, Michael" <michael.giles@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 03/08/2012 10:57 AM  
Subject: VW Group: Transmission Choices in Verify

Hello Sandra,

The Volkswagen Group uses a variety of automatic transmission types. Most are covered by the available selections in the Verify System.

One type is not. We have a "double clutch" automatic transmission that uses two clutches instead of a torque converter.

Because our vehicles have a driver selectable "Tiptronic" (manual shift) mode in addition to the fully automatic mode, we use the semi-automatic designation in Verify for these transmissions.

This transmission, not having a torque converter, does not use lock-up because much like a manual transmission, it is locked up all of the time.

This transmission does not fit into the automated manual transmission designation. We have automated manual transmissions and they are a considerably different configuration.

Historically, we have been entering these "double clutch" transmissions as semi-automatic with no lock-up because there is no torque converter to lock up.

Since the more recent business rules have been in place, when a transmission is designated as an automatic or semi-automatic, Verify requires the torque converter lock-up option to be set to yes.

With the current business rules in Verify, we now have to go back and reset the torque converter lock-up option to yes for all of these transmissions, even though they do not have it.

We were instructed to do that by Bob Peavyhouse in order to pass all of the business rules for the CAFE / GHG submissions.

If possible, we would like to have a new lock-up option choice\* added in Verify of "not applicable" for these transmissions and the business rules changed to allow that choice for automatic and semi-automatic transmissions.

We are not the only manufacturer using double clutch transmissions.

Please contact me if you need any more information. Any feedback you can give me will be greatly appreciated. If you reply to this e-mail, please reply to all.

\*Entries for Lock-Up can be found in the following locations:

Vehicles, Fuel Properties and Tests - Vehicle and Test Information-Vehicle Information - Transmission Certification - Test Group - Evap Stnds/Tests/Models-Evaporative Family # - Certified Models  
Fuel Economy - General Information - Transmission Class Information

Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com



**To:** "Harris, Dale" [Dale.Harris@vw.com]  
**Cc:** "Kata, Leonard" [Leonard.Kata@vw.com]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[];  
N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 3/8/2012 11:18:03 PM  
**Subject:** Re: GHG Early Credit Report - Question (VWGoA)  
[Early Credit Report.xlsx](#)  
[@vw.com](#)  
<http://www.volkswagengroupamerica.com/>

Dale,

Thanks for the reminder---sorry it took me so long to reply.

1. Yes It's OK to modify the templates if you need to. Please keep track of the modifications and document them somewhere in your early credit report. For example, the report could indicate that VW used the EPA template "Averaging, Banking and Trading Summary Table" provided at <http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>, except we modified it as follows: XXX; YYYY; and ZZZZ. Note that we didn't anticipate that manufacturers would use the "Pre-Model Year Report Projected CREE Compliance Level" template for early credit reports because it is based on model type data instead of subconfiguration data (like CAFE calculations).

2. Your modifications look OK to me---to track Federal and Calif/177 State compliance separately for Pathway 3 early credits. However, as you know VW can only use one pathway for early credits---so I'd recommend that you revise your description in the Comments column from "Credits Pathways 2 & 4" to "Pathway 3 Federal production" and "Pathway 3 Calif/177 State Production" (or something to that effect).

Regards

From: "Harris, Dale" <Dale.Harris@vw.com>  
To: David Good/AA/USEPA/US@EPA  
Cc: "Kata, Leonard" <Leonard.Kata@vw.com>  
Date: 03/02/2012 01:29 PM  
Subject: GHG Early Credit Report - Question (VWGoA)

Dave

Hello!!

I am Dale Harris Certification Specialist reporting to Len Kata at VWGoA. I am preparing the GHG Early Credit Report for submission and need clarity/direction on a couple of issues.

1. I am using the 'Banking & Trading Summary Table' provided via the EPA GHG site for the Early Credit Report. Is this the appropriate template??
2. I have modified the template to include multiple car and truck rows to enable pathway 3 calculations to appear appropriately. Is it ok to modify the template??

In addition I have attached a draft version of the report that will enable you to provide responses to the questions above. Thanks!!!

Regards,  
Dale Harris  
Certification Specialist

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office (EEO)  
3800 Hamlin  
AuburnHills Michigan 48326  
United States of America

P: +1 248 754-4218  
E: Dale.Harris@vw.com  
<http://www.volkswagengroupamerica.com/>

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**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**From:** "Harris, Dale"  
**Sent:** Fri 3/9/2012 1:00:26 PM  
**Subject:** RE: GHG Early Credit Report - Question (VWGoA)

Dave

Thanks for the feedback!!!! Truly appreciated.

Regards,  
Dale Harris  
Certification Specialist

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office (EEO)  
3800 Hamlin  
AuburnHills Michigan 48326  
United States of America

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-----Original Message-----

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Thursday, March 08, 2012 6:18 PM  
To: Harris, Dale  
Cc: Kata, Leonard; Roberts French; Tom Anderson  
Subject: Re: GHG Early Credit Report - Question (VWGoA)

Dale,

Thanks for the reminder---sorry it took me so long to reply.

1. Yes It's OK to modify the templates if you need to. Please keep track of the modifications and document them somewhere in your early credit report. For example, the report could indicate that VW used the EPA template "Averaging, Banking and Trading Summary Table" provided at <http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>, except we modified it as follows: XXX; YYYY; and ZZZZ. Note that we didn't anticipate that manufacturers would use the "Pre-Model Year Report Projected CREE Compliance Level" template for early credit reports because it is based on model type data instead of subconfiguration data (like CAFE calculations).

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Regards

From: "Harris, Dale" <Dale.Harris@vw.com>  
To: David Good/AA/USEPA/US@EPA  
Cc: "Kata, Leonard" <Leonard.Kata@vw.com>  
Date: 03/02/2012 01:29 PM  
Subject: GHG Early Credit Report - Question (VWGoA)

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Dale Harris  
Certification Specialist

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office (EEO)

3800 Hamlin  
AuburnHills Michigan 48326  
United States of America

P: +1 248 754-4218  
E: Dale.Harris@vw.com  
<http://www.volkswagengroupamerica.com/>

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(See attached file: Early Credit Report.xlsx)

**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA;"Thomas, Richard (EEO)"  
[Richard.Thomas@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; im  
Snyder/AA/USEPA/US@EPA[]  
**From:** "Hart, Robert (VWoA)"  
**Sent:** Mon 3/12/2012 3:44:05 PM  
**Subject:** Transmission Lock-Up Definitions in Verify  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Hello Bob,

I had a discussion with Dave Good regarding automated manual transmissions and double clutch automatic transmissions.

I believe we finally have the lock-up definition that has been plaguing Richard Thomas with the CAFE and GHG submissions nearly corrected in our system.

To recap:

Automated manual and double clutch (DSG) transmissions with a manual shift mode (by paddles or shift lever) will come under the new designation: "AMS" with Verify Release 10.

Lock-up refers to "transmission lock-up", not torque converter lock-up, for these transmissions and the answer is: "Y" (yes).

For MY 2012 and prior model years we will leave the DSG transmissions designated as Semi-Automatic (SA) and set the lock-up to "Y".

For our automated manual (AM) transmissions, the transmission lock-up is currently set to "N" (no). Should it be set to "Y"?

Currently, transmission lock-up for our CVT transmissions is set to "N".

Based on my understanding of the definition of "transmission lock-up", the answer for our CVT transmissions (no torque converter used) should be "Y". Is this true?

Let me know if the above is correct.

We will correct whatever is necessary based on your response.

I think, with these answers, this will finally end the confusion with this issue for us.

Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: [robert.hart@vw.com](mailto:robert.hart@vw.com)

**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 3/12/2012 5:26:42 PM  
**Subject:** Re: VW Group - Request for Certificate for Bentley Test Group DBEX06.0501

Mike, I don't see it in the queue. Just the 3 Audi requests.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William" <William.Rodgers@vw.com>  
Date: 03/07/2012 01:22 PM  
Subject: VW Group - Request for Certificate for Bentley Test Group DBEX06.0501

Hello Jim,

We submitted a cert request for the Bentley test group DBEXV06.0501. This is for the Continental Flying Spur, Continental Supersports Convertible, Continental GT and GTC carlines.

Please note this is a carryover test group with no new vehicles tested. We would appreciate your review at your earliest convenience. Please call me if you have any questions on this request.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** [Ex. 6]  
**Cc:** Sebastian.Berenz@vw.com[]  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Mon 3/12/2012 6:50:40 PM  
**Subject:** RE: Test results for your vehicle

Dear [Ex. 6]

I just called the VW representative, Mr. Sebastian Berenz, who told me that it is VW's company protocol to first contact a vehicle owner via mail then follow up with a phone call. Mr. Berenz said that he expects that you will be receiving the letter either today or tomorrow so he plans to call you soon.

Mr. Berenz also said that you may call or e-mail him, if you like. His contact information is as follows:

Sebastian Berenz  
Manager In-Use Emission Compliance  
Engineering Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4211  
E-Mail: sebastian.berenz@vw.com

Best regards,

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

**From:** [Ex. 6]  
**To:** Lynn Sohacki/AA/USEPA/US@EPA  
**Date:** 03/12/2012 02:38 PM  
**Subject:** RE: Test results for your vehicle

Dear Lynn,  
until today I have not heard back from AUDI, Mr. Sebastian.  
Can you kindly provide me with his telephone number and EMAIL?  
Thanks

[Ex. 6]

> Subject: Test results for your vehicle  
> To: [Ex. 6]  
> From: Sohacki.Lynn@epamail.epa.gov  
> Date: Wed, 29 Feb 2012 14:24:35 -0500  
>  
>



> Dear **Ex. 6**  
>  
> Thank you for your call this morning. Attached is a letter with a  
> summary of your vehicle test results.  
>  
> I forwarded your phone number and e-mail address to my contact at Audi  
> who will, hopefully, contact you soon.  
>  
> Again, thank you for your participation in EPA's in-use testing program.  
>  
> Sincerely yours,  
>  
> Lynn Sohacki  
> Environmental Protection Agency  
> 734-214-4851  
> 734-214-4869 (fax)  
>  
> (See attached file: R104-0077 2009 Audi A5 test results.pdf)

**To:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 3/12/2012 8:18:11 PM  
**Subject:** RE: VW Group - Request for Certificate for Bentley Test Group DBEX06.0501  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Yes, they recommend putting in 9999.99 for standard

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** Jim Snyder/AA/USEPA/US  
**To:** "Giles, Michael" <michael.giles@vw.com>  
**Date:** 03/12/2012 04:02 PM  
**Subject:** RE: VW Group - Request for Certificate for Bentley Test Group DBEX06.0501

For flex fuel, you only need to do the E10 evap tests.

For OCREE, I guess you need to put something higher in the methane and N2O limits. Either equal to your methane w/DF, or just 9999. I'll ask the Verify staff what they are typically recommending but they are in a meeting this afternoon.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Giles, Michael" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 03/12/2012 02:02 PM  
**Subject:** RE: VW Group - Request for Certificate for Bentley Test Group DBEX06.0501

Hi Jim –

Besides the issue below, the methane test failed once DF was added . This prevented the cert request from processing.

Note, we (VW Group) are using opt-CREE. Our understanding is that methane (and N2O) standards only apply if when using CREE option.

Can you advise or call me to discuss.

Thanks,  
Mike

From: Giles, Michael  
Sent: Monday, March 12, 2012 1:33 PM  
To: 'Jim Snyder'  
Subject: RE: VW Group - Request for Certificate for Bentley Test Group DBEX06.0501

Thanks for the follow up. I see that my cert request was rejected for failed tests. We are working on it now anyway ... so a good time to fix it.

I have a related question – for these flex fuel concepts, should we list gasoline evap tests in the CSI? I believe we only need to list the worst case (E10) tests, is this correct?

Thanks,  
Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, March 12, 2012 1:27 PM  
To: Giles, Michael  
Subject: Re: VW Group - Request for Certificate for Bentley Test Group DBEX06.0501

Mike, I don't see it in the queue. Just the 3 Audi requests.

Jim Snyder  
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Compliance Division  
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(734) 214-4946  
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To: Jim Snyder/AA/USEPA/US@EPA  
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Hello Jim,

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Please note this is a carryover test group with no new vehicles tested. We would appreciate your review at your earliest convenience. Please call me if you have any questions on this request.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Tue 3/13/2012 12:58:17 PM  
**Subject:** RE: VW Group - Request for Certificate for Bentley Test Group DBEX06.0501  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:[mailto:Snyder.Jim@epamail.epa.gov])  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hi Jim,

Thanks for the quick response. I was able to get the cert request through this time. I also submitted a revised initial application with the new CSI.

Please review this application at your earliest convenience.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, March 12, 2012 4:18 PM  
To: Jim Snyder  
Cc: Giles, Michael  
Subject: RE: VW Group - Request for Certificate for Bentley Test Group DBEX06.0501

Yes, they recommend putting in 9999.99 for standard

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
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FAX +1-248-754-4207



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Hart, Robert (VWoA)"  
**Sent:** Tue 3/13/2012 12:58:25 PM  
**Subject:** Investigation into possible changes for VW Group in the Verify System  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Hello Jim,

I need to have a brief discussion with you regarding the topic in an e-mail that I sent to Sandra Somoza that she forwarded to you.

We are investigating the possibility of reconfiguring the Volkswagen Group in the Verify System.

We are looking at consolidating some or all five of our manufacturers under one group to simplify our interaction with the Verify System.

We need to know any negative aspects of making this change.

This will require "buy in" from Audi, VW, Bentley, Lamborghini and Bugatti because the test group names will all have the same identifier and, unless I am wrong, the certificates will all come under the same group name. For instance, if a Volkswagen Group was created to contain all five manufacturers, then all certificates would come back as Volkswagen Group certificates.

This is the type of question that I need answers for. If it proves beneficial to do this, in order to "sell" it, I will need the answers to all of the questions that I know the group will ask.

I have not had any luck catching you at your desk. I have been trying to call you several times over the last few days without success. I did not leave any messages.

Please call me or let me know when it would be a good time for me to call you to discuss this.

Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: [robert.hart@vw.com](mailto:robert.hart@vw.com)

**To:** "Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**Cc:** CN=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US  
**Sent:** Tue 3/13/2012 1:48:15 PM  
**Subject:** Re: Transmission Lock-Up Definitions in Verify  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Bob,

From my standpoint (processing labels and CAFE), it doesn't really matter unless you have multiple models and the only difference is that one of them has lockup=yes, and the other lockup=no. The only thing that matters to the processing of the data is that you are consistent throughout the certification and labeling process.

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Robert Peavyhouse  
Compliance Division  
U.S. EPA - Office of Transportation and Air Quality  
phone: (734) 214-4814  
fax: (734) 214-4053  
email: [peavyhouse.robert@epa.gov](mailto:peavyhouse.robert@epa.gov)  
website: <http://www.epa.gov/nvfel/>

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
To: Robert Peavyhouse/AA/USEPA/US@EPA  
Cc: David Good/AA/USEPA/US@EPA, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, Jim Snyder/AA/USEPA/US@EPA  
Date: 03/12/2012 11:44 AM  
Subject: Transmission Lock-Up Definitions in Verify

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Engineering and Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Phone: (248) 754-4224  
Fax: (248) 754-4207  
E-mail: robert.hart@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Tue 3/13/2012 3:45:56 PM  
**Subject:** VW Group - 4 Certificate Requests for the Audi 4.0L V8 Bi-turbo  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I have submitted the following Initial Application and Certificate Requests for the 2013 Audi test group DAD XV04.03UJ. I would greatly appreciate if you could expedite a Certificate of Conformity for this one, considering the start of production of April 16th for the Bentley models and needed time for ARB certification.

Evaporative Family DADXR0155D4A represents the FEDV models Audi A8 and A8L with Stop Start technology. These FEDV tests are under way and will be forthcoming in the near future. All other EDV and FEDV tests for the test group have been submitted.

Test Group/Evap Family

DAD XV04.03UJ- DADXR0130D61

DAD XV04.03UJ- DADXR0155D4B

DAD XV04.03UJ- DADXR0155D4A

DAD XV04.03UJ- DADXR0140C7A

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Hart, Robert (VWoA)" [Robert.Hart@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Tue 3/13/2012 4:38:27 PM  
**Subject:** Re: Transmission Lock-Up Definitions in Verify  
[robert.hart@vw.com](mailto:robert.hart@vw.com)

Bob H,

Regarding your question about what should be entered for the lock-up field for CVT transmissions, for about 60% of the CVT transmissions in Verify, manufacturers have entered No (and about 40 % they entered Yes). for 2011-2013 data in Verify.

Use your own judgment on what to enter in VW/Audi's case-----but as Bob P said, please be consistent from Test group info to FE Label to CAFE data entry.

Dave

**From:** Robert Peavyhouse/AA/USEPA/US  
**To:** "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
**Cc:** David Good/AA/USEPA/US@EPA, Jim Snyder/AA/USEPA/US@EPA, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
**Date:** 03/13/2012 09:48 AM  
**Subject:** Re: Transmission Lock-Up Definitions in Verify

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Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 3/13/2012 10:12:21 PM  
**Subject:** Re: VW Group - 4 Certificate Requests for the Audi 4.0L V8 Bi-turbo  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Bill, the cert application for the Bentley 6.0L has the wrong CSI in it. The CSI is from a 2.0L Jetta. I scanned the 4.0L Part one's CSI and didn't notice any issues.

Also, I don't see fee payment on the 3.0L Audi yet. I'll wait a few more days on that one.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
Date: 03/13/2012 11:46 AM  
Subject: VW Group - 4 Certificate Requests for the Audi 4.0L V8 Bi-turbo

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Test Group/Evap Family  
DAD XV04.03UJ- DADXR0130D61  
DAD XV04.03UJ- DADXR0155D4B  
DAD XV04.03UJ- DADXR0155D4A  
DAD XV04.03UJ- DADXR0140C7A

Thanks,

Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.

Engineering and Environmental Office  
3800 Hamlin Rd.  
Auburn Hills, MI 48436  
United States  
office (248) 754-4219  
fax (248) 754-4207  
william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Wed 3/14/2012 11:28:29 AM  
**Subject:** RE: VW Group - 4 Certificate Requests for the Audi 4.0L V8 Bi-turbo  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[Robert.Hart@vw.com](mailto:Robert.Hart@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Thanks.

Mike Giles will address the 6.0L CSI. Perhaps it has cylinder deactivation so the 2.0L CSI would still apply....just a thought J

We are checking on the payment issue.

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, March 13, 2012 6:12 PM  
To: Rodgers, William  
Subject: Re: VW Group - 4 Certificate Requests for the Audi 4.0L V8 Bi-turbo

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From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Hart, Robert (VWoA)" <Robert.Hart@vw.com>  
Date: 03/13/2012 11:46 AM  
Subject: VW Group - 4 Certificate Requests for the Audi 4.0L V8 Bi-turbo

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DADXV04.03UJ- DADXR0130D61  
DADXV04.03UJ- DADXR0155D4B  
DADXV04.03UJ- DADXR0155D4A  
DADXV04.03UJ- DADXR0140C7A

Thanks,

Bill Rodgers  
Emissions Certification Engineer

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United States  
office (248) 754-4219  
fax (248) 754-4207  
william.rodgers@vw.com

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**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Wed 3/14/2012 11:55:39 AM  
**Subject:** VW Group - Bentley 6.0L application correction

Hello Jim,

I corrected the Bentley Application which had the wrong CSI. Revision 02 (CBI and FOI) have been uploaded.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Wed 3/14/2012 12:47:56 PM  
**Subject:** FW: 2013 Audi Certification Fee Filing Forms  
[2013 EPA Cert Fees DADXT03.0TLF toEPA.pdf](#)  
[2013 EPA Cert Fees DADXJ03.03UF to EPA.pdf](#)  
[20120314084207633.pdf](#)  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

Jim,

The 3.0L payment was made February 24th. Please check with Willem VandenBroek.

Regards,

Bill

From: Thomas, Richard (EEO)  
Sent: Wednesday, March 14, 2012 8:39 AM  
To: EPA Certification Fee Filing Forms (fees@epa.gov)  
Cc: Rodgers, William; VandenBroek.Willem@epamail.epa.gov  
Subject: 2013 Audi Certification Fee Filing Forms

Please find attached two Audi test groups fee filings forms. Payment of \$65,356 was electronically made on February 24, 2012. If you have any questions please contact me directly.

Regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)





**U.S. ENVIRONMENTAL PROTECTION AGENCY  
MOTOR VEHICLE AND ENGINE COMPLIANCE PROGRAM  
ON-HIGHWAY FEE FILING FORM**

FOR CERTIFICATION APPLICATIONS RECEIVED IN CALENDAR YEAR 2012

Manufacturer Name VOLKSWAGEN Group of America, Inc.

Address 3800 Hamlin Road

City/State/Zip Code/Country Auburn Hills, MI 48326

On-Highway Certification Request Type (check one)

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> LDV/LDT/MDPV/HDV (Chassis cert) FEDERAL (\$32,678) | <input type="checkbox"/> HDV EVAP-ONLY (\$511)      |
| <input type="checkbox"/> LDV/LDT/MDPV/HDV (Chassis cert) CAL-ONLY (\$16,899)           | <input type="checkbox"/> HDE CALIF-ONLY (\$511)     |
| <input type="checkbox"/> HDE (Engine Dyno cert) FEDERAL (\$42,506)                     | <input type="checkbox"/> MOTORCYCLE (\$1,210)       |
|  | <input type="checkbox"/> LD/MDPV/HDV ICI (\$53,639) |

EPA standard family or test group name:

D	A	D	X	T	0	3	.	0	T	L	F
---	---	---	---	---	---	---	---	---	---	---	---

Amount paid (U.S. Funds Only):

\$ 32,678.00

Enter the check number, or the statement "WIRE" or "ACH":

EFT

**Reduced Fee Section (40 CFR §1027.120)**

Reduced fee calculation (minimum initial payment \$750): Total number of vehicles/units covered: \_\_\_\_\_

Aggregate retail sales price of the vehicles/units: \$ \_\_\_\_\_ x 1% = \$ \_\_\_\_\_

Check box if an Independent Commercial Importer: ☐ List the VIN of imported vehicles/engines below:


Company Representative: Richard Thomas

Signature: *RE Thomas*

Title: Emission Cert Strategist Phone/Fax: 248 754 4113 / 248 754 4207 Date: 02/14/2012

E-mail Address: Richard.Thomas@VW.com

**Submission of payments and forms:**

- (1) Online: **Forms** may be found and submitted with or without **payments** online at [www.Pay.gov](http://www.Pay.gov).  
(2) By mail: For check payments only, send **checks** and this **form** to:

**Environmental Protection Agency  
Motor Vehicle and Engine Compliance Program  
P.O. Box 979032  
St. Louis, MO 63197-9000**

- (3) Transmit offline Wire payments to the New York Federal Reserve Bank. (See Instructions, p.2)  
(4) Transmit offline ACH payments to the Federal Reserve Bank of Cleveland. (Instructions, p.2)  
(5) **Forms** not submitted under (1) and (2) above can be sent as email attachments to [Fees@epa.gov](mailto:Fees@epa.gov).  
Forms and payments sent in ways other than the above may be delayed or ineffective. See the Instructions for sending checks and forms by private mail service (e.g., Federal Express).

The public reporting and recordkeeping burden for this collection of information is estimated to average 18 minutes per response. Send comments on EPA's need for this information, the accuracy of the provided burden estimate, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques, to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed Form 3520-29 to this address.

This form expires: 1/1/2013



**U.S. ENVIRONMENTAL PROTECTION AGENCY  
MOTOR VEHICLE AND ENGINE COMPLIANCE PROGRAM  
ON-HIGHWAY FEE FILING FORM**

**FOR CERTIFICATION APPLICATIONS RECEIVED IN CALENDAR YEAR 2012**

Manufacturer Name VOLKSWAGEN Group of America, Inc.

Address 3800 Hamlin Road

City/State/Zip Code/Country Auburn Hills, MI 48326

On-Highway Certification Request Type (check one)

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EPA standard family or test group name:

D	A	D	X	J	0	3	.	0	3	U	F
---	---	---	---	---	---	---	---	---	---	---	---

Amount paid (U.S. Funds Only):

\$ 32,678.00

Enter the check number, or the statement "WIRE" or "ACH":

EFT

**Reduced Fee Section (40 CFR §1027.120)**

Reduced fee calculation (minimum initial payment \$750): Total number of vehicles/units covered: \_\_\_\_\_

Aggregate retail sales price of the vehicles/units: \$ \_\_\_\_\_ x 1% = \$ \_\_\_\_\_

Check box if an Independent Commercial Importer: ☐ List the VIN of imported vehicles/engines below:


Company Representative: Richard Thomas

Signature: *Richard Thomas*

Title: Emission Cert Strategist Phone/Fax: 248 754 4113 / 248 754 4207 Date: 02/14/2012

E-mail Address: Richard.Thomas@VW.com

**Submission of payments and forms:**

- (1) Online: **Forms** may be found and submitted with or without **payments** online at [www.Pay.gov](http://www.Pay.gov).  
(2) By mail: For check payments only, send **checks** and this **form** to:

**Environmental Protection Agency  
Motor Vehicle and Engine Compliance Program  
P.O. Box 979032  
St. Louis, MO 63197-9000**

- (3) Transmit offline **Wire payments** to the New York Federal Reserve Bank. (See Instructions, p.2)  
(4) Transmit offline **ACH payments** to the Federal Reserve Bank of Cleveland. (Instructions, p.2)  
(5) **Forms** not submitted under (1) and (2) above can be sent as email attachments to [Fees@epa.gov](mailto:Fees@epa.gov).  
Forms and payments sent in ways other than the above may be delayed or ineffective. See the Instructions for sending checks and forms by private mail service (e.g., Federal Express).

The public reporting and recordkeeping burden for this collection of information is estimated to average 18 minutes per response. Send comments on EPA's need for this information, the accuracy of the provided burden estimate, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques, to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed Form 3520-29 to this address.

This form expires: 1/1/2013

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Thur 3/15/2012 10:42:30 AM  
**Subject:** FW: Confirmation of Certification Fees Payment

Jim, FYI.

-----Original Message-----

From: Thomas, Richard (EEO)  
Sent: Wednesday, March 14, 2012 1:28 PM  
To: Rodgers, William  
Subject: FW: Confirmation of Certification Fees Payment

Paid !

-----Original Message-----

From: fees@epa.gov [mailto:fees@epa.gov]  
Sent: Wednesday, March 14, 2012 1:28 PM  
To: Thomas, Richard (EEO)  
Subject: Confirmation of Certification Fees Payment

To the representative for Audi:

Your certification Fee Filing Form(s) submitted for the following family or test group(s) and the associated financial documentation for your payment of \$65356.00 were received on 03/14/2012.

- DADXT03.0TLF

- DADXJ03.03UF

This message indicates only that EPA has received record of your payment and form(s) for the above certification fee. It does not constitute the granting of a Certificate of Conformity by EPA or convey any information about the status of your certification application for the subject family or test group(s).

Please do not respond to this email. If you have any questions regarding certification of the family or test group(s), please contact your EPA Certification Representative; for questions on fees, contact Fees@epa.gov.

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard" [Leonard.Kata@vw.com]; Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Thur 3/15/2012 2:53:25 PM  
**Subject:** Audi 4.0L V8 Description - Test Group DAD XV04.03UJ  
[Pages from SSP607 WG DE.pdf](#)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)  
[image002.png](#)

Hello Jim,

I received some information regarding the following questions you posed to me yesterday during our phone conversation:

- 1) Is the Start-stop function controlled by brake pedal switch activation or brake hydraulic pressure, other?

Answer:

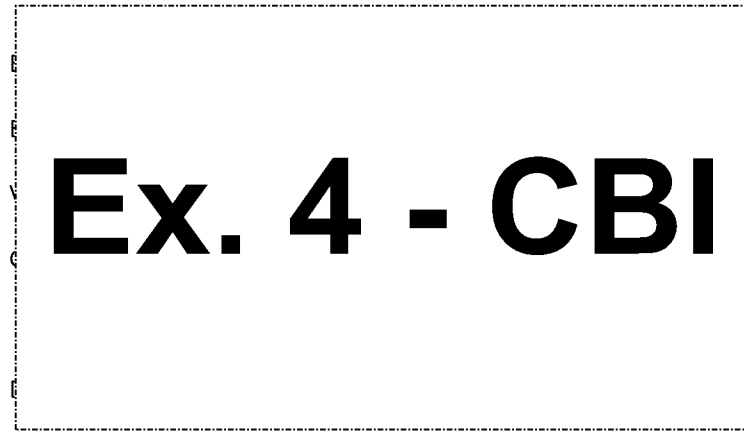
**Ex. 4 - CBI**

- 2) Please provide diagrams or presentation on Audi Cylinder Deactivation explaining the design and function.

Answer:

**Ex. 4 - CBI**

Operating Conditions:



Please let me know if you have further questions.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)



P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Thur 3/15/2012 5:08:09 PM  
**Subject:** RE: VW Group - Jetta 1.4L ORVR Revision  
attm1 MY2013 JettaHybrid sys-overview 7.pdf

Hello Lynn,

Pleased find attached the latest revision of this request, which I believe will answer your questions. We concur with your comments below (see report for additional and corrected details). Please let me know if there are any others areas which are not clear. If all is good, we would appreciate your review / approval at your earliest convenience.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Thursday, March 08, 2012 3:21 PM  
To: Giles, Michael  
Subject: Re: VW Group - Jetta 1.4L ORVR Revision

Hi, Michael.

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It also helps to know that, for the most part the FTIV is closed except in the case of refueling, for diagnostic purposes or in the event of critical pressure in the fuel tank. With that understanding, however, I wonder whether the same section of vent line shown as hashed in the "Regeneration" figure should also be hashed in the "Operation Mode" figure. I think the same conditions would apply.

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correct?

In none of the diagrams is gasoline shown entering the fuel tank. I would suggest adding an arrow indicating fuel going into the fuel tank in the "Filling Ventilation" figure.

Let me know if you have any questions, Michael.

Regards,

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

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To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 03/06/2012 12:44 PM  
Subject: VW Group - Jetta 1.4L ORVR Revision

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- a) Shows fuel into tank during this phase, which is incorrect. (corrected in new file)

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- b) Does the tank de-pressurization occur during this step,

or somewhere other step? Yes!

c) What is vapor path during de-pressurization? (When the red/black broken line is red)

d) When does de-pressurization occur (if not in this step)? No, look at c)

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Q6: For the diagrams, please describe the yellow, black and mixed lines in the keys (for example in Regeneration, the line between FTIR and Carbon canister). (add for the broken line in new file)

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

## Attachment 1

---

### Description and Schematic of the Jetta Hybrid 1.4I ORVR System Model Year 2013

The fuel tank system is designed to load the canister with hydrocarbons only when refueling and is therefore a **non-integrated ORVR-System**.

The Fuel Tank Isolation Valve (FTIV) is opened only in case of refueling, for diagnostic purposes and in case of the fuel tank pressure reaching a critical threshold. During soak the tank is sealed and therefore no vapor can escape to ambient.

For safety purposes and to avoid damage to the system during soak time, the FTIV is equipped with mechanical bypass valves, which open below -100 mbar or over +300 mbar difference between fuel tank and ambient pressure.

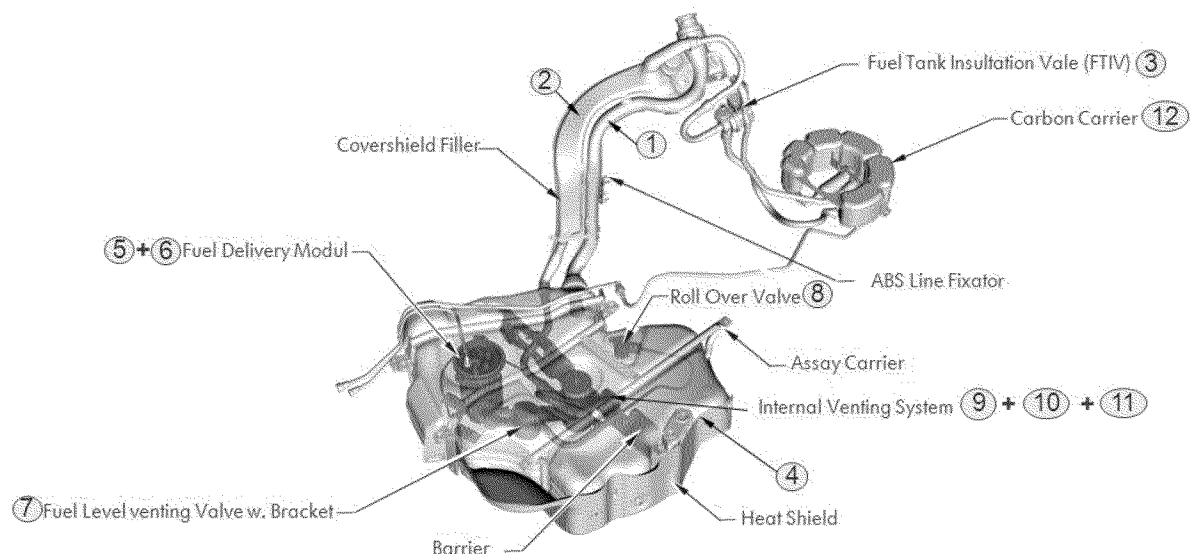
When the engine is running, the fuel tank pressure is controlled by a purge strategy comparable to conventional vehicle concepts.

Before refueling is possible, the fuel tank is vented stepwise by the FTIV to the canister.

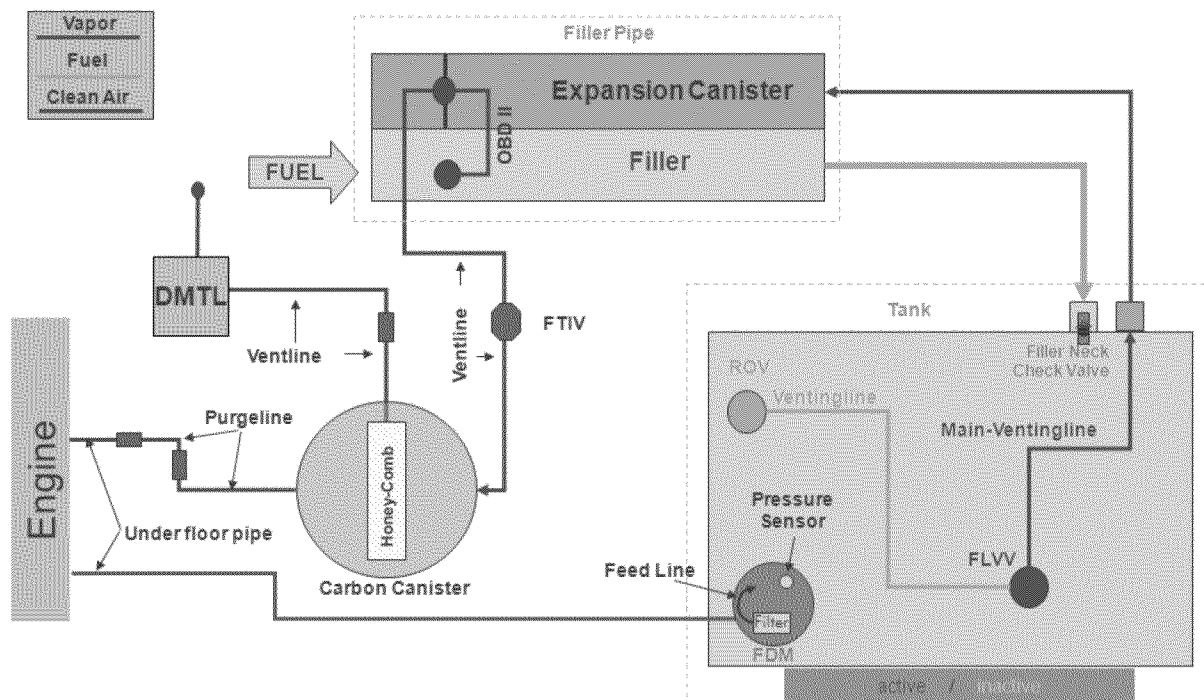
The components and assemblies which are involved in these operations are:

1. Fill pipe
2. Expansion volume
3. Fuel Tank Isolation Valve (FTIV)
4. Fuel tank (high pressure)
5. Fuel Delivery Modul (FDM)
6. Fuel Tank Pressure Sensor
7. Fuel Level Venting Valve (FLVV)
8. Roll-Over Valve (ROV)
9. Main Vent line (inside fuel tank)
10. Vent line (connection between fuel tank, filler and expansion volume) used for leak check too
11. Vent line (connection between ROV and carbon canister)
12. Carbon Canister (Honey-Comb)
13. Vent line (connection between carbon canister and DMTL) (not pictured)
14. Diagnosis Module Tank Leakage (DMTL) (not pictured)

### Schematic of Jetta Hybrid 1.4I ORVR System



### Filling Ventilation:



For refueling, the fuel-tank-button inside the car must first be pushed in order to vent the fuel tank. The fuel tank is then vented stepwise by the FTIV to the carbon canister. The next step of the refueling operation is to remove the filler cap.

The flow of fuel through the filler neck tube into the fuel tank provides a liquid seal. This prevents fuel vapor from escaping to the atmosphere.

The fuel vapor is channeled through the fuel level venting valve (FLVV) to the carbon canister via the main vent line, expansion volume and through the pressure-holding-valve and outside vent line (multilayer). The hydrocarbons are stored in the carbon canister.

When the tank fuel level reaches the fuel level venting valve (FLVV), its float mechanism closes the pathway for vapor and causes a fuel nozzle shut off.

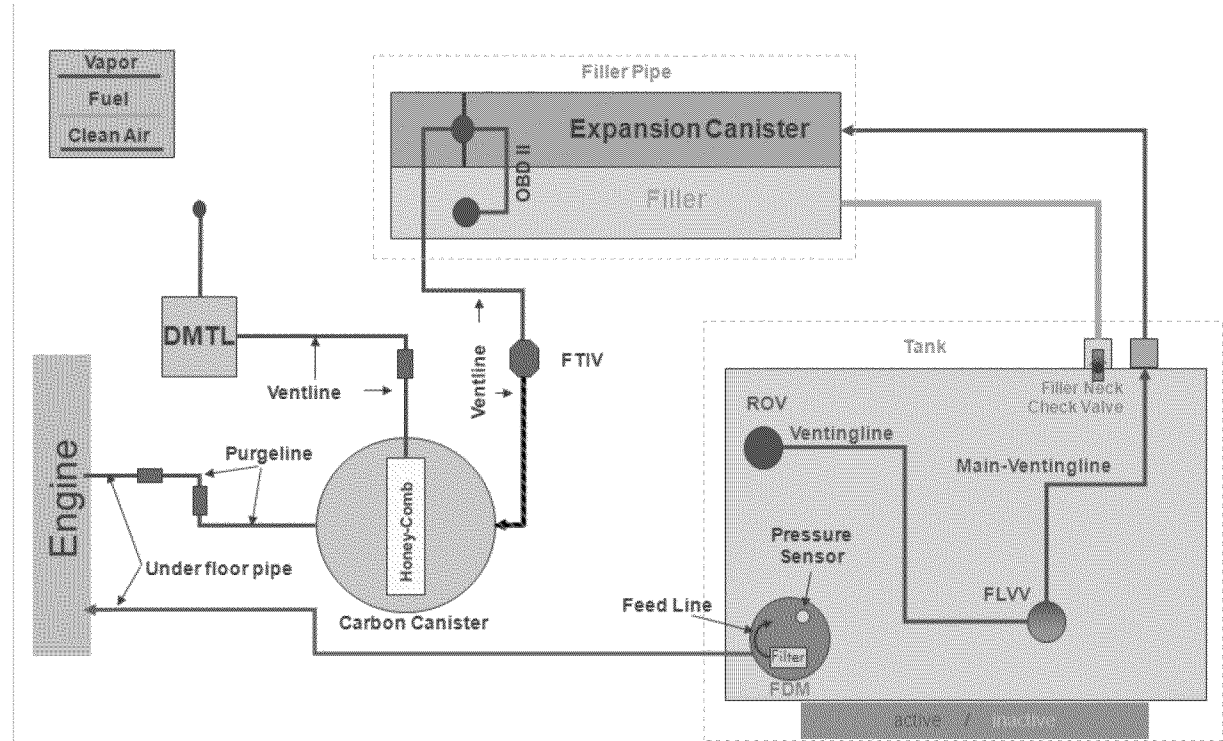
The refueling operation ends with securing the filler cap.

Only in case of refueling, preparation for refueling and for diagnostic purposes a reverse flow over DMTL would be active.

## Attachment 1

### Operation Ventilation:

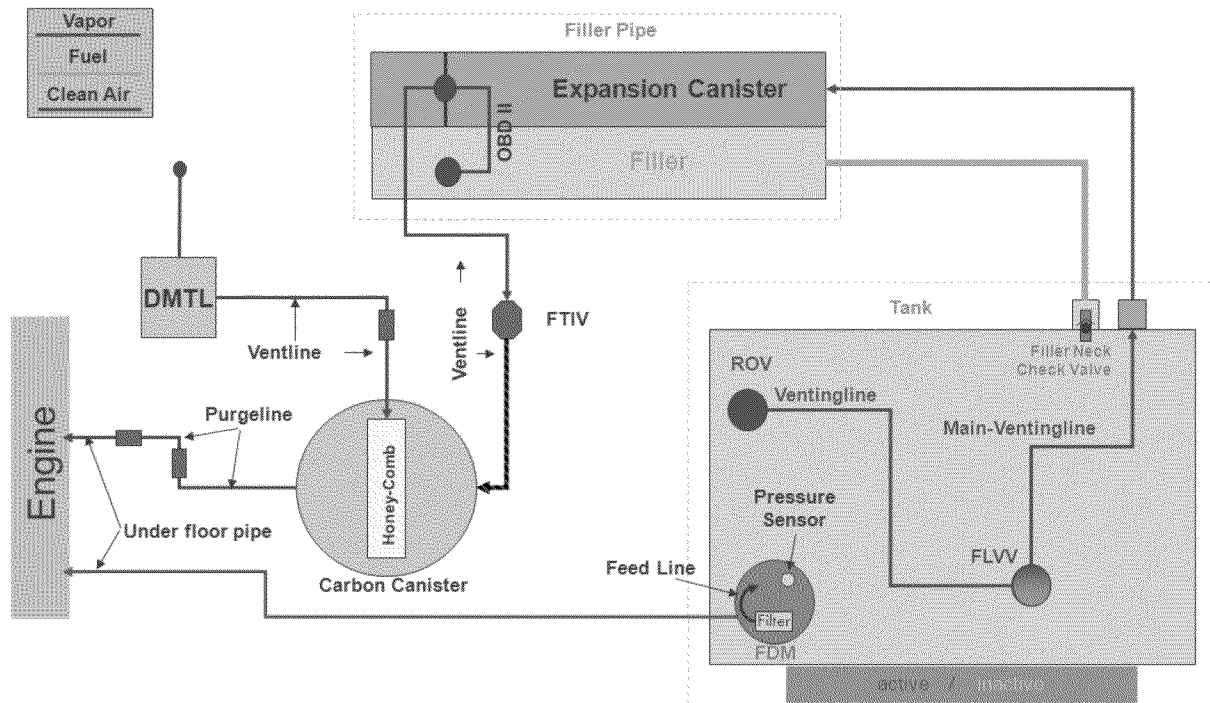
The tank is pressurized. The fuel tank isolation valve (FTIV) is closed.  
(The Fuel Tank Isolation Valve is opened only in case of refueling, for diagnostic purposes and in case of the fuel tank pressure reaching a critical threshold.)



## Attachment 1

### Regeneration:

The tank is at atmospheric pressure or pressurized. Carbon canister venting with fresh air over DMTL. (Regular venting/Diagnostic mode)



➡ **This line can be active or inactive:** The Fuel Tank Isolation Valve (FTIV) is opened only in case of refueling, for diagnostic purposes and in case of the fuel tank pressure reaching a critical threshold. During soak the tank is sealed and therefore no vapor can escape to ambient.

To prevent fuel evaporation to the atmosphere, a charcoal canister is installed between the tank and the atmosphere, which absorbs evaporating hydrocarbons. As the charcoal canister has a limited storage capacity, it has to be discharged at a sufficient rate. This is realized by opening a connection between the charcoal canister and the intake manifold – the purge valve. After the canister purge valve is opened, ambient air is drawn in through the charcoal canister due to the vacuum in the intake manifold. The stored hydrocarbons are discharged and enter the combustion chamber together with the ambient air. The additional air and fuel charges during the canister purge phases lead to a fuel mixture deviation, which is compensated by the ECM's lambda control.

For diagnostic purposes the pressure in the tank will be completely equalized. But under normal driving conditions without extreme atmospheric conditions the FTIV will not open below 50hPa pressure. So normally we have no de-pressurization of the tank during this step.



**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Fri 3/16/2012 7:30:17 PM  
**Subject:** RE: VW Group - Jetta 1.4L ORVR Revision  
1-3-2012 vw non-integrated orvr.pdf

Hi, Michael.

Your last revision addresses my concerns and answers my questions.

I will attach a scanned copy of the front page with my "review complete" statement.

Have a good weekend.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 03/15/2012 01:08 PM  
Subject: RE: VW Group - Jetta 1.4L ORVR Revision

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Regards,  
Mike

Michael Giles  
Certification Specialist  
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Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
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-----Original Message-----

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Thursday, March 08, 2012 3:21 PM  
To: Giles, Michael  
Subject: Re: VW Group - Jetta 1.4L ORVR Revision

Hi, Michael.

Thank you for the new illustrations. They were very helpful.

**Ex. 4 - CBI**

**Ex. 4 - CBI**

Let me know if you have any questions, Michael.

Regards,

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
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From: "Giles, Michael" <michael.giles@vw.com>  
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Date: 03/06/2012 12:44 PM  
Subject: VW Group - Jetta 1.4L ORVR Revision

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Certification Specialist

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3800 Hamlin Road  
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United States of America  
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[attachment "attm1\_MY2013\_JettaHybrid\_sys-overview\_7.pdf" deleted by Lynn Sohacki/AA/USEPA/US]

# VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder  
Compliance and Innovative Strategies Division  
Office of Mobile Sources  
U. S. Environmental Protection Agency  
2000 Traverwood Drive  
Ann Arbor, MI 48105

Leonard W. Kata Name  
Manager – Emis. Cert. Title  
EEO Department  
248-754-4204 Phone  
248-754-4207 Fax  
leonard.kata@vw.com E-Mail

January 3, 2012 Date

Subject: Pre-Certification Submission of Non Integrated Onboard  
Refueling Vapor Recovery System Description (including a sealed  
fuel tank)

VOLKSWAGEN GROUP OF AMERICA, INC.  
1800 DAWKINS ROAD  
AUBURN HILLS, MI 48326  
PHONE: (248) 754-5000

Dear Mr. Snyder,

Volkswagen Group of America, Inc. herewith provides, on behalf of Volkswagen AG, a pre-certification description of an evaporative/refueling emission family that incorporates an onboard refueling vapor recovery (ORVR) system. This submission is provided in response to the updated information request described by the U.S. Environmental Protection Agency in their manufacturers guidance correspondence, VPCD-98-15 (LDV/LDT/SV/ICI) and CCD-00-10 (LDV/LDT/SV/ICI).

The system description applies to the following 2013 model year Volkswagen vehicle:

<u>Model Year</u>	<u>EVAP/Refueling Family</u>	<u>Vehicle Models</u>
2013	DVWXR0110PHE (LEV II / Tier 2)	VW Jetta Hybrid 1.4I

Specific responses to the information requirements listed in Enclosure I of the manufacturer guidance correspondence are enclosed with this letter.

If you have any questions with regard to this information please contact our office in Auburn Hills at (248) 754-4229.

Sincerely,

For *Mike Giles,*  
Leonard W. Kata  
Volkswagen Group of America, Inc.

Engineering and Environmental Office

Enclosures

*3/16/12  
EPA review complete. Review  
includes documents received  
by EPA on 3/6/12 and 3/15/12.*

*L. Schuchman*

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Fri 3/16/2012 7:32:28 PM  
**Subject:** RE: VW Group - Jetta 1.4L ORVR Revision  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Sohacki.Lynn@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[image001.gif](#)

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Thank you for the quick reply, it is appreciated.

Regards,

Mike

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(See attached file: 1-3-2012 vw non-integrated orvr.pdf)

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[attachment "attm1\_MY2013\_JettaHybrid\_sys-overview\_7.pdf" deleted by Lynn Sohacki/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Mon 3/19/2012 5:32:35 PM  
**Subject:** VW Group - Decision Information VID: AU641 10375/13  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I Have uploaded a Decision Information to Verify for the following test group and VID. This is for the 2013 Audi A8L equipped with our VW-designed W12 engine.

The tests represent an increased ETW to 5,250, from 5,000 in 2012, due to the addition of rear A/C in the passenger compartment. The final drive was also changed to optimize MPG but no new technology is included.

Test group: DVWXV06.3UA8

VID: AU641 10375/13

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

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[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Beierschmitt, Thomas (T.A.)" [tbeiers1@ford.com]; 'Bill Pagels'" [bill.pagels@meidenamerica.com]; 'Bob Maxwell'" [remaxwell@comcast.net]; hris Nevers/AA/USEPA/US@EPA;"'Dave Kosmalski'" [david.kosmalski@gm.com]; 'Dave Kosmalski'" [david.kosmalski@gm.com]; 'Dennis Pawlak'" [Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid'" [Douglas.Reid@na.mitsubishi-motors.com]; 'Duoba, Mike'" [mduoba@anl.gov]; 'Jeff Foor'" [jdf14@chrysler.com]; 'Jim Smith'" [james.smith@chrysler.com]; im Snyder/AA/USEPA/US@EPA;"'Keith Thompson'" [Keith.Thompson@bepco.com]; 'Keith Thompson'" [Keith.Thompson@bepco.com]; 'Kent Theil'" [okt@chrysler.com]; 'kyle.bedsole@gm.com'" [kyle.bedsole@gm.com]; 'Mahmoud Yassine'" [mky@chrysler.com]; 'Marc Belzile'" [marc.a.belzile@tc.gc.ca]; 'mark paxton'" [mpaxton@ganassi.com]; 'MBrussow@sae.org'" ['MBrussow@sae.org']; 'Meyer, Norm'" [norm.meyer@tc.gc.ca]; Okawa, Naoyasu (N.)" [okawa.n@mazda.co.jp]; 'Paulina.Carl@epamail.epa.gov'" ['Paulina.Carl@epamail.epa.gov']; Peabody, Jason (J.A.)" [jpeabod6@ford.com]; ete Janosi [petejanosi@yahoo.com]; Suanne.Thomas@vw.com" [Suanne.Thomas@vw.com]; 'takashi\_a\_fujiwara@ahm.honda.com'" [takashi\_a\_fujiwara@ahm.honda.com]; iffany Jackson [JacksT2@nrd.nissan-usa.com]; homas SchrodT/AA/USEPA/US@EPA;"'tom.beierschmitt@tema.toyota.com'" ['tom.beierschmitt@tema.toyota.com']; 'tom.beierschmitt@tema.toyota.com'" ['tom.beierschmitt@tema.toyota.com']; 'tommy\_chang@ahm.honda.com'" ['tommy\_chang@ahm.honda.com']; 'William Meschievitz'" [william.meschievitz@tema.toyota.com]; 'Khan, Farrukh'" [KhanF@NRD.NISSAN-USA.COM]

**Cc:** Carl Paulina/AA/USEPA/US@EPA;Jeff Foor [j.foor@chrysler.com]; eff Foor [j.foor@chrysler.com]; im Snyder/AA/USEPA/US@EPA[]

**From:** "Glodich, Jeffrey (J.M.)"

**Sent:** Wed 3/21/2012 11:51:34 AM

**Subject:** Cancelled: J2951 Phase II Review

Cancelled for this month only due to JSAE meeting.

Rescheduled due to conflicts.

Purpose:

- Discuss implementation and macro issues
- Revisit deferred issues that were not addressed in the initial publication

Meeting Info:

**Ex. 6**

Web Address <https://www.connectmeeting.att.com><<https://www.connectmeeting.att.com>/>

**Ex. 6**

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Wed 3/21/2012 5:50:57 PM  
**Subject:** VW Group - Decision Information for test group DADXJ03.03UF  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I have submitted the following Decision Information to Verify for your consideration. This test vehicle was tested in both Start-stop modes; Stop-start activated (VID Config-0) and deactivated (VID Config-1). As the result, we plan to average the tests for fuel economy. The Configuration-0 represents the worst case EDV for the test group, Audi A8 3.0L V6 (supercharged) with Stop-start activated.

Evaporative testing was also performed on Configuration-0 as the result of a new Evap. Family which now uses a small in-line bleed canister.

Please let me know if you have any questions.

Test Group: DADXJ03.03UF

Evap. Family: DADXR0155D4A

VID: D3UF-DAQ Configuration-0

VID: D3UF-DAQ Configuration-1

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Wed 3/21/2012 6:23:30 PM  
**Subject:** In-use vehicles scheduled for next week  
[parameters form.xlsx](#)

Hi, Sebastian.

Listed below is the information for the vehicles that we have scheduled for next week.

R105RXX-0024 (2009 Audi/A5) - VIN# Ex. 6 0730 Veh. Incoming on 3/27/12 (Tuesday)

Please use the new attached form to send testing information to me for these vehicles before pick-up. Return the attached form in excel format so that the values may be automatically transferred to our testing network.

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

- \*disabling traction control, stability control and any load leveling the vehicle may have\*
- preferred method for loading the canister
- preferred fuel drain method
- any special starting procedures
- ABS disabling instructions
- for flex-fuel vehicles, the fuel switch procedure

I will pass this information along to our contractor, URS, and lab personnel. Paper copies or e-mails sent directly to URS or lab personnel may result in incorrect information being distributed.

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Wed 3/21/2012 7:30:20 PM  
**Subject:** In-use vehicles scheduled for next week  
[parameters form.xlsx](#)

Hi, Sebastian.

I asked **Ex. 6** if these maintenances can both be done on Thursday morning. I'll let you know if there is a problem.

Listed below is the information for the vehicles that we have scheduled for next week.

R104RXX-0050 (2009 Audi/A5) - VIN# **Ex. 6** 0800 Veh. Pick up on 3/29/12 (Thursday)

Please use the new attached form to send testing information to me for these vehicles before pick-up. Return the attached form in excel format so that the values may be automatically transferred to our testing network.

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

- \*disabling traction control, stability control and any load leveling the vehicle may have\*
- preferred method for loading the canister
- preferred fuel drain method
- any special starting procedures
- ABS disabling instructions
- for flex-fuel vehicles, the fuel switch procedure

I will pass this information along to our contractor, URS, and lab personnel. Paper copies or e-mails sent directly to URS or lab personnel may result in incorrect information being distributed.

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax



**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Thur 3/22/2012 1:19:52 PM  
**Subject:** In-use vehicles scheduled for next week  
[parameters form\\_WAUDK78TX9A025592\\_R105RXX-0024.xlsx](#)  
[parameters form\\_WAUDK78T39A026289\\_R104RXX-0050.xlsx](#)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

Attached you will find the test requests for the two Audi A5s for test group 9AD XV03.23LC.

We will be at your laboratory on Thursday, 29th of March at 10am to inspect both cars.

Let me know if you have any questions.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

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# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

**EPA Vehicle Control Number:**

**Equivalent Test Weight:**  Pounds (Integer Only: Equivalent Test Weight)

**Nominal Fuel Tank Capacity:**  Gallons **40% Fill**  Gallons

**Drive Axle:**  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

**Mfr. Shift Schedule (if required)**  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

**A**  Lb-force

**B**  Lb-force\*mpH

**C**  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

**Canister Loading Process:**

**Fuel Draining Process:**

**ABS Disabling Process:**

**Fuel Switch Process (Flex Fuel only):**

**Comments:**

### For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Audi A5 Sedan 1/31/2012  
34459mi manual

9ADXT03.23LC wrong, it's not a truck  
9ADXR0140BBQ

Bin5 LEV2

VL	245/45 R18 DOT	3608
HL	245/45 R18 DOT	4208
HR	245/45 R18 DOT	4208
VR	245/45 R18 DOT	4208



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

**EPA Vehicle Control Number:**

**Equivalent Test Weight:**  Pounds (Integer Only: Equivalent Test Weight)

**Nominal Fuel Tank Capacity:**  Gallons **40% Fill**  Gallons

**Drive Axle:**  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

**Mfr. Shift Schedule (if required)**  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

**A**  Lb-force

**B**  Lb-force\*mpH

**C**  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

**Canister Loading Process:**

**Fuel Draining Process:**

**ABS Disabling Process:**

**Fuel Switch Process (Flex Fuel only):**

**Comments:**

### For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

**Manufacturer Representative:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**EG&G Representative:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**EPA Representative:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Audi A5 Sedan 1/31/2012  
34459mi manual

9ADXT03.23LC wrong, it's not a truck  
9ADXR0140BBQ

Bin5 LEV2

VL	245/45 R18 DOT	3608
HL	245/45 R18 DOT	4208
HR	245/45 R18 DOT	4208
VR	245/45 R18 DOT	4208

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Thur 3/22/2012 1:41:13 PM  
**Subject:** FW: In-use vehicles scheduled for next week - Correction  
[parameters form\\_WAUDK78T39A026289\\_R104RXX-0050.xlsx](#)  
[parameters form\\_WAUDK78TX9A025592\\_R105RXX-0024.xlsx](#)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>

Sorry Lynn,

But I had the wrong weight in the sheet. Both vehicles are automatics according to our information and run in the 4000 pound class.

Please use these ones.

Sorry for that.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

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From: Berenz, Sebastian  
Sent: Thursday, March 22, 2012 9:20 AM  
To: Lynn Sohacki (Sohacki.Lynn@epamail.epa.gov)  
Subject: In-use vehicles scheduled for next week

Hello Lynn,

Attached you will find the test requests for the two Audi A5s for test group 9AD XV03.23LC.

We will be at your laboratory on Thursday, 29th of March at 10am to inspect both cars.

Let me know if you have any questions.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211



Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

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# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number:

Equivalent Test Weight:  Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:  Gallons 40% Fill  Gallons

Drive Axle:  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

A  Lb-force

B  Lb-force\*mpH

C  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Audi A5 Sedan  
34459mi manual

1/31/2012

9ADXT03.23LC wrong, it's not a truck  
9ADXR0140BBQ

Bin5 LEV2

VL	245/45 R18 DOT	3608
HL	245/45 R18 DOT	4208
HR	245/45 R18 DOT	4208
VR	245/45 R18 DOT	4208



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

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**Nominal Fuel Tank Capacity:**  Gallons **40% Fill**  Gallons

**Drive Axle:**  (Select number from list below )

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- 3 Front Drive Str Left
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- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

**Mfr. Shift Schedule (if required)**  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

**A**  Lb-force

**B**  Lb-force\*mpH

**C**  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

**Canister Loading Process:**

**Fuel Draining Process:**

**ABS Disabling Process:**

**Fuel Switch Process (Flex Fuel only):**

**Comments:**

### For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Audi A5 Sedan 1/31/2012  
34459mi manual

9ADXT03.23LC wrong, it's not a truck  
9ADXR0140BBQ

Bin5 LEV2

VL	245/45 R18 DOT	3608
HL	245/45 R18 DOT	4208
HR	245/45 R18 DOT	4208
VR	245/45 R18 DOT	4208

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Thur 3/22/2012 6:13:08 PM  
**Subject:** VW Group - questions about DF's

Hello Jim,

Could you confirm that for the new EPA assigned ADF's (CD-12-07), that we should still use the listed NMOG values as DF's for NMHC and methane?

On a related note, I understand that starting with MY14 we will no longer be able to use NMOG DF's for methane. If so, would carryover test groups be exempt from this requirement?

Thanks

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Mon 3/26/2012 12:02:35 PM  
**Subject:** VW Group - Bugatti Test Group DBGTV08.0V16

Hello Jim,

Today we submitted our certification request for Bugatti Test Group DBGTV08.0V16. This is a carryover test group, with EPA assigned DF's. Please note, these values were changed to the new additive values per EPA's latest guidance letter CD-12-07. So the certification values on the CSI will be slightly different.

Please let me know if any questions arise on review of this request.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Kata, Leonard"  
[Leonard.Kata@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Mon 3/26/2012 6:28:08 PM  
**Subject:** VW Group - Conditional Certificate Request for Test Grp DADXJ03.03UF  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I have submitted the following Certificate Requests for the Audi Test Group DADXJ03.03UF, Audi A8 (start-stop) and S-models with 3.0L TFSI V6. The A8 requires a conditional Certificate due to the short lead time before planned production start-up and pending EPA confirmatory tests. It would be great if we could get these approved by the end of this week, Mar. 30th .

Test Grp/Evap Family

DADXJ03.03UF-DADXR0155D4A - conditional

DADXJ03.03UF-DADXR0140B8A

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)



P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Mon 3/26/2012 6:43:45 PM  
**Subject:** VW Group - Wednesday testing information

Hi Jim,

Just a follow up to my voice message:

As you know we have two vehicles scheduled to begin testing at EPA on Wednesday (a Volkswagen and a Lamborghini.).

I am planning to be there Wednesday to witness the start of both tests if possible. For the VW test, we also have an engineer from Germany (Tobias Glas) who is planning to be there. For Lamborghini, there are 4 other engineers. I understand that there are usually limits to the number of witnesses, but would like to see if that is a hard rule in the case of the Lamborghini as they have requested I be there if possible.

Some other information about the Lamborghini: During the testing over the last week, there was some wheel slip which occurred during the US06 test, making it difficult to maintain the trace. We think this may have something to do with the rollers, because they did not seem to have this issue at their dyno. We just want to let you know about this in case the same thing happens at EPA.

Also, would it be possible for us to meet briefly, and possibly get a small tour of the testing facilities?

Lastly, if you could forward a testing schedule when it is available, it would be appreciated.

Please call me if you have any questions.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 3/26/2012 8:42:59 PM  
**Subject:** Re: VW Group - Wednesday testing information

Mike, I forgot to give you Vince Mazaitis' phone number. He supports all our group's lab testing that we do. He starts early so you should ask for him when you and the others get here wednesday. He's at 214-4864.

Also, I assume they showed Ben how to start and drive the car when they dropped it off, but they didn't mention to him about the start/stop feature. I assume this is transparent to the driver?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Giles, Michael" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** "Rodgers, William" <William.Rodgers@vw.com>  
**Date:** 03/26/2012 02:43 PM  
**Subject:** VW Group - Wednesday testing information

Hi Jim,

Just a follow up to my voice message:

As you know we have two vehicles scheduled to begin testing at EPA on Wednesday (a Volkswagen and a Lamborghini.).

I am planning to be there Wednesday to witness the start of both tests if possible. For the VW test, we also have an engineer from Germany (Tobias Glas) who is planning to be there. For Lamborghini, there are 4 other engineers. I understand that there are usually limits to the number of witnesses, but would like to see if that is a hard rule in the case of the Lamborghini as they have requested I be there if possible.

Some other information about the Lamborghini: During the testing over the last week, there was some wheel slip which occurred during the US06 test, making it difficult to maintain the trace. We think this may have something to do with the rollers, because they did not seem to have this issue at their dyno. We just want to let you know about this in case the same thing happens at EPA.

Also, would it be possible for us to meet briefly, and possibly get a small tour of the testing facilities?

Lastly, if you could forward a testing schedule when it is available, it would be appreciated.

Please call me if you have any questions.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Tue 3/27/2012 1:18:48 PM  
**Subject:** VW Group - Lamborghini follow up

Hello Jim,

Just to follow up on a couple open points,

For the production vehicles, there will be a button to disable start-stop. But for the test vehicle, we do not have this button since it was decided that we were only doing confirmatory testing in active mode.

Also, there is in fact brake pressure activation. However we are told it is "minimal". So, it might not be apparent to the driver compared to an Audi system.

Hope this helps,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Tue 3/27/2012 3:41:26 PM  
**Subject:** VW Group - Confirmatory tests for Audi A8 VID D3UF-DAQ  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I have submitted the Confirmatory test Supplemental Information for the VID D3UF-DAQ (A8 3.0L TFSI V6), Configuration 0 and Configuration 1

I have also changed the vehicle availability date in the Decision Information to April 30, 2012.

Please proceed with scheduling these tests and let me know as soon as possible if April 30th is acceptable.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 3/27/2012 4:31:45 PM  
**Subject:** Re: VW Group - Lamborghini follow up

Can you also verify the engine bonnet position? We normally test with it open unless requested otherwise.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 03/27/2012 09:18 AM  
Subject: VW Group - Lamborghini follow up

Hello Jim,

Just to follow up on a couple open points,

For the production vehicles, there will be a button to disable start-stop. But for the test vehicle, we do not have this button since it was decided that we were only doing confirmatory testing in active mode.

Also, there is in fact brake pressure activation. However we are told it is "minimal". So, it might not be apparent to the driver compared to an Audi system.

Hope this helps,  
Mike  
Michael Giles  
Certification Specialist  
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Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Tue 3/27/2012 5:00:38 PM  
**Subject:** RE: VW Group - Lamborghini follow up  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)

Hi Jim,

Yes, engine bonnet open is good.

Thanks,

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, March 27, 2012 12:32 PM  
To: Giles, Michael  
Subject: Re: VW Group - Lamborghini follow up

Can you also verify the engine bonnet position? We normally test with it open unless requested otherwise.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 03/27/2012 09:18 AM  
Subject: VW Group - Lamborghini follow up

Hello Jim,

Just to follow up on a couple open points,

For the production vehicles, there will be a button to disable start-stop. But for the test vehicle, we do not have this button since it was decided that we were only doing confirmatory testing in active mode.

Also, there is in fact brake pressure activation. However we are told it is "minimal". So, it might not be apparent to the driver compared to an Audi system.

Hope this helps,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 3/27/2012 8:02:39 PM  
**Subject:** Message on GHG early credit reports

Early Credits Report Due March 30, 2012

We wish to remind manufacturers that reports that detail participation in the optional early CO2 credit programs under EPA's light-duty vehicle greenhouse gas regulations are due no later than 90 days after the end of the 2011 model year (see 40 CFR 86.1867-12(e)). For most manufacturers, this means that the required reports must be submitted to EPA by Friday, March 30, 2012. See 40 CFR 86.1867-12(e) for the specific reporting requirements, but please note that the general stated requirement is that the report contain "all information necessary for the calculation of the manufacturer's early credits in each of the 2009 through 2011 model years." This requirement is especially important because our Verify system is neither receiving detailed values nor making or verifying any of the calculations. Thus, EPA intends to carefully review these reports to ensure consistency and equity across manufacturers, and we will be able to ensure a level playing field only if the reports clearly show how the early credits were determined. If you have any questions, you may direct them to your EPA certification representative, or to Rob French at 734-214-4380, or french.roberts@epa.gov. Please submit your reports through Verify and send a copy to Rob French.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Tue 3/27/2012 9:09:54 PM  
**Subject:** VW Group - Decision Information for VID D3UF-BMQ and D3UF-BAQ  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I submitted Decision Information for the follow test group and VID's. These represent FEDV models for this 3.0L TFSI V6 test group with No Start-stop technology. No new technology is included. Please let me know if you have any questions.

Test Group: DADXJ03.03UF

FEDV

VID: D3UF-BMQ, Configuration-0 (S5 Coupe with manual trans.)

VID: D3UF-BAQ , Configuration-0 (S4 Sedan/S5 Coupe with automatic trans.)

VID: D3UF-BAQ, Configuration-1 (S4 Sedan /S5 Coupe with automatic trans.)

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Wed 3/28/2012 7:21:17 PM  
**Subject:** VW Group - Decision Information Audi 4.2L V8 (VID D3UL-BSQ)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hi Jim,

I submitted tests and Decision Information for the following test group and vehicles:

These tests represent 2013 Audi RS5 Coupe and RS5 Cabriolet models with a hi-performance 4.2L V8 (naturally aspirated). No new technology is involved. Manufacturer confirmatory FTP and HWY tests are required for Configuration-0 being a potential Gas Guzzler.

Please let me know your decision as soon as possible so we can plan accordingly.

Test Group: DADXV04.23UL

D3UL-BSQ, Configuration 0 (EDV – RS5 Cabriolet)

D3UL-BSQ, Configuration 1 (RS5 Coupe)

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
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United States

office (248) 754-4219

fax (248) 754-4207

william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 3/28/2012 8:29:49 PM  
**Subject:** VW confirmatory results  
[2013 VW beetle confirmatory test results.pdf](#)

Mike, here's the data. Its also in Verify. Don't get too used to this fast turnaround, its not typical.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

CERT  
CVS

# NVFEL Laboratory Test Data

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0133-001

Vehicle ID: VW465 790007/09

### Test Information



Test Date: 3/28/2012

MFR Name AUDI

Key Start / Hot Soak: 07:11:34 / 09:36

MFR Codes: 640

ADX

Fuel Container ID: F00023

Config #: 03

Fuel Type: 61 Tier 2 Cert Test Fuel

Transmission: S

Test Procedure: 21 Federal fuel 2-day exhaust (w/can loa

Shift Schedule: A09980005

Calculation Method: Gasoline

Beginning Odometer: 005391.0 MI

Pretest Remarks:

Drive Schedule: flp3bag

Soak Period: 20.9 hours

### Bag Data

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Phase 1						
Sample	11.975	80.830	1.070	1.197	3.230	
Ambient	2.418	0.402	0.035	0.049	2.031	
Net Concentration	9.775	80.464	1.039	1.153	1.382	8.258

Remarks:

### Phase 2

Sample	2.286	2.738	0.101	0.776	1.944	
Ambient	2.402	0.371	0.039	0.048	2.028	
Net Concentration	0.024	2.389	0.064	0.731	0.033	-0.012

Remarks:

### Phase 3

Sample	2.288	16.826	0.053	1.065	1.974	
Ambient	2.407	0.364	0.042	0.047	2.040	
Net Concentration	0.073	16.491	0.015	1.022	0.096	-0.033

Remarks:

### Phase 4

Sample	
Ambient	
Net Concentration	

Remarks:

### Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC / NMOG (gpm)	Vol MPG (mpg)
Phase 1	0.091	1.510	0.029	339.9	0.015	0.077 / 0.080	26.054
Phase 2	0.000	0.072	0.003	344.7	0.001	0.000 / 0.000	25.888
Phase 3	0.001	0.309	0.000	301.1	0.001	0.000 / 0.000	29.593
Weighted	0.01923	0.43560	0.00766	331.695	0.00366	(NMOG=1.04xNMHC) 0.0159 / 0.0166	

### Fuel Economy

	Gasoline MPG	Dyno Settings	Dyno #:
Phase 1	25.99		D002
Phase 2	25.83		Inertia: 3625
Phase 3	29.52		EPA Set Co A: 8.29
			EPA Set Co B: 0.20559999
			EPA Set Co C: 0.021129999
Weighted	26.76		Emiss-Bench: D002

v101208 - d002

EPAVDAEm120328064325

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Print Time 28-Mar-2012 11:41

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0133-001

Vehicle ID: VW465 790007/09

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.327	5.436	0.105	1223.6	0.053	0.276	1.098
Phase 2	0.001	0.276	0.011	1329.3	0.002	0.000	
Phase 3	0.002	1.113	0.002	1083.5	0.004	0.000	

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.76	28.76	28.76	
Avg Cell Temp (degF)	75.02	75.14	75.68	
Dew Point (degF)	49.22	49.78	48.16	
Specific Humidity (grains/lbm)	54.13	55.27	51.98	
NOx Corr Factor	0.9107	0.9151	0.9024	
CO2 Dilution Factor	11.110	17.253	12.554	
CFV Vmix (scf @68F)	2049.02	3508.42	2046.47	
CVS Flow Rate Avg (scfm)	242.39	241.88	242.00	
Fan Placement: One Fan - Down - Front				
Phase Time (secs)	507.20	870.30	507.40	
Distance (miles)	3.600	3.857	3.598	
Bag Analysis Time (secs)	77.0	74.0	73.6	

### MFR Test Results

for Procedure 21 Federal fuel 2-day exhaust (w/can load)

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0224	0.45	0.005	325	0	0.018

Odometer	MPG	PM
5237 M	27.4	0.002

MPG is 2.39 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno:  
Fuel: 61 Tier 2 Cert Gasoline

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## NVFEL Laboratory Test Data

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0133-003

Vehicle ID: VW465 790007/09

## Test Information



Test Date: 3/28/2012

Key Start: 08:27:02

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Test Fuel

Test Procedure: 03 HWFET (hwfetprep\_hwfet)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: AUDI

MFR Codes: 640 ADX

Config #: 03

Transmission: S

Shift Schedule: A09980011

Beginning Odometer: 005404.0 MI

Drive Schedule: hwfet\_hwfet

## Bag Data

## Phase 1

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Sample	2.955	7.593	0.113	1.489	2.079	
Ambient	2.451	0.309	0.060	0.048	1.999	
Net Concentration	0.776	7.318	0.059	1.447	0.303	0.444

Remarks:

## Phase 2

Sample  
Ambient  
Net Concentration

Remarks:

## Phase 3

Sample  
Ambient  
Net Concentration

Remarks:

## Phase 4

Sample  
Ambient  
Net Concentration

Remarks:

## Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC / NMOG (gpm)	Vol MPG (mpg)
Phase 1	0.004	0.072	0.001	222.3	0.002	0.002 / 0.002	40.132

(NMOG=1.04xNMHC)

## Fuel Economy

Gasoline MPG  
Phase 1 40.04

## Dyno Settings

Dyno #: D002


Inertia: 3625

EPA Set Co A: 8.29


EPA Set Co B: 0.20559999

EPA Set Co C: 0.021129999

Emiss-Bench: D002

NVFEL Laboratory Test Data							CVS	
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
Test Number: 2012-0133-003				Vehicle ID: VW465 790007/09				
	<b>Results</b>	<u>HC-FID</u> (grams)	<u>CO</u> (grams)	<u>NOx</u> (grams)	<u>CO2</u> (grams)	<u>CH4</u> (grams)	<u>NMHC</u> (grams)	<u>Meth Response</u>
	Phase 1	0.038	0.733	0.009	2275.9	0.017	0.022	1.098
<b>Test Conditions</b>								
		<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>			
	Barometer (inHg)	28.76						
	Avg Cell Temp (degF)	75.54						
	Dew Point (degF)	49.28						
	Specific Humidity (grains/lbm)	54.24						
	NOx Corr Factor	0.9111						
	CO2 Dilution Factor	8.991						
	CFV Vmix (scf @68F)	3036.20						
	CVS Flow Rate Avg (scfm)	238.13						
	Fan Placement: One Fan - Down - Front							
	Phase Time (secs)	764.99						
	Distance (miles)	10.239						
	Bag Analysis Time (secs)	74.9						
<b>MFR Test Results</b>								
for Procedure 3 HWFE								
<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>		
1E+07	0.0017	0.15	0.001	210	0	0.0004		
<u>Odometer</u>	<u>MPG</u>	PM						
5248 M	42.4	0.002						
MPG is 5.90 % higher than EPA MPG								
			MFR Lab: Volkswagen AG, Dept EASZ/1					
			Dyno:					
			Fuel: 61 Tier 2 Cert Gasoline					
<div style="display: flex; justify-content: space-between; font-size: small;"> <span>v101208 - d002    EPAVDAEm120328080302</span> <span>Page 2 of 2</span> <span>Print Time 28-Mar-2012 11:43</span> </div>								

CERT

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0133-002			Vehicle ID: VW465 790007/09				
<b>Test Information</b>							
	Test Date: 3/28/2012		MFR Name: AUDI				
	Key Start: 09:11:05		MFR Codes: 640      ADX				
	Fuel Container ID: F00023		Config #: 03				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: S				
	Test Procedure: 89 us062bag (us06warmup_2bagus06)		Shift Schedule: A09980041				
	Calculation Method: Gasoline		Beginning Odometer: 005425.0 MI				
Pretest Remarks:			Drive Schedule: us06warmup_2bagus06				
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
<b>Phase 1</b>							
Sample	3.445	175.199	1.850	0.828	2.389		
Ambient	2.377	0.565	0.016	0.045	1.968		
Net Concentration	1.218	174.670	1.835	0.786	0.546	0.619	
Remarks:							
<b>Phase 2</b>							
Sample	5.809	207.290	0.182	1.129	2.948		
Ambient	2.418	0.548	0.027	0.045	1.965		
Net Concentration	3.599	206.789	0.158	1.087	1.152	2.335	
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.024	6.876	0.108	486.2	0.012	0.012 / 0.013	17.956
Phase 2	0.031	3.560	0.004	294.1	0.011	0.020 / 0.021	29.767
(NMOG=1.04xNMHC)							
Composite	0.02914	4.29697	0.02723	336.831	0.01157	0.0182 / 0.0189	
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>	<u>Dyno Settings</u>					
Phase 1	17.91	Dyno #: D002					
Phase 2	29.70	Inertia: 3625					
		EPA Set Co A: 8.29					
		EPA Set Co B: 0.20559999					
		EPA Set Co C: 0.021129999					
Composite	25.90	Emiss-Bench: D002					

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0133-002

Vehicle ID: VW465 790007/09

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.042	12.245	0.193	865.8	0.022	0.021	1.098
Phase 2	0.191	22.181	0.025	1832.8	0.071	0.124	



### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.76	28.76		
Avg Cell Temp (degF)	75.47	75.13		
Dew Point (degF)	49.66	49.22		
Specific Humidity (grains/lbm)	55.02	54.13		
NOx Corr Factor	0.9142	0.9107		
CO2 Dilution Factor	15.838	11.654		
CFV Vmix (scf @68F)	2126.35	3253.34		

CVS Flow Rate Avg (scfm) 538.32 534.80

Fan Placement: US06 Only - One Large Fan - Down - Front

Phase Time (secs)	130.00	365.00	107.01
Distance (miles)	1.781	6.231	
Bag Analysis Time (secs)	80.2	267.8	

### MFR Test Results

for Procedure 90 US06

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0266	2.46	0.019	325	0	0.0177

Odometer 5268 M  
MPG 27.1 PM 0.006  
MPG is 4.64 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno:  
Fuel: 61 Tier 2 Cert Gasoline

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 3/28/2012 9:15:49 PM  
**Subject:** Re: VW Group - Confirmatory tests for Audi A8 VID D3UF-DAQ  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Okay, I forwarded it to Ben.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>  
Date: 03/27/2012 11:41 AM  
Subject: VW Group - Confirmatory tests for Audi A8 VID D3UF-DAQ

Hello Jim,

I have submitted the Confirmatory test Supplemental Information for the VID D3UF-DAQ (A8 3.0L TFSI V6), Configuration 0 and Configuration 1

I have also changed the vehicle availability date in the Decision Information to April 30, 2012.

Please proceed with scheduling these tests and let me know as soon as possible if April 30th is acceptable.

Regards,

Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office  
3800 Hamlin Rd.  
Auburn Hills, MI 48436  
United States  
office (248) 754-4219  
fax (248) 754-4207  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!





**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Thur 3/29/2012 11:39:45 AM  
**Subject:** VW Group - Decision Information for Audi A8 4.0T VID D3UJ-DAQ  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I submitted the Decision Information for the 2013 Audi A8/A8L 4.0T V8 with Cyl. Deactivation and Start-stop. This is the vehicle we discussed that you were interested in confirming. A manufacturer confirmatory HWY test is required should it be waived.

Please let us know as soon as possible what your decision is.

Test Group: DAD XV04.03UJ

VID: D3UJ-DAQ, Configuration-0

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Thur 3/29/2012 11:45:55 AM  
**Subject:** RE: VW confirmatory results  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Thanks Jim!

Regards,

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, March 28, 2012 4:30 PM  
To: Giles, Michael  
Cc: Vincent Mazaitis  
Subject: VW confirmatory results

Mike, here's the data. Its also in Verify. Don't get too used to this fast turnaround, its not typical.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA; "Verify Help Desk (verifyhelp@csc.com)" [verifyhelp@csc.com]; im Snyder/AA/USEPA/US@EPA; "Verify Help Desk (verifyhelp@csc.com)" [verifyhelp@csc.com]; Verify Help Desk (verifyhelp@csc.com)" [verifyhelp@csc.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Thur 3/29/2012 1:26:38 PM  
**Subject:** 2013 VWGoA PC Final CAFE and Verify  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

Hi Bob;

Verify has finally accepted the 2011 VWGoA Import Passenger Car CAFE. For your information, we had to create the 2011 Lamborghini Gallardo model indexes, 52, 53, and 54 as new under the Audi sign on, and they are now Audi labels 152, 153 and 154.

The Audi label 58 for the Volkswagen Eos was created under Volkswagen, and is now label index 158.

I will look forward to your audit of the PC CAFE.

Beginning with model year 2013, I will create all Volkswagen Group brand fuel economy labels under Volkswagen. The only exception is the Bentley GT and GTC equipped with the Audi certified 4.0L V8 engine for which I had already labeled for 2013. We are hoping this will eliminate some of these permission trials we have to establish when it comes time for the CAFE and GHG reporting.

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Thur 3/29/2012 2:58:05 PM  
**Subject:** RE: Lamborghini Laboratory Test Data  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Thanks Jim,

Lamborghini is reviewing the data, if they feel it is necessary we might call to discuss.

Could you double check that the lab guys have kept the fuel drain hose with the vehicle? I think we just put it on the seat for the transport.

Thanks

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, March 29, 2012 10:03 AM  
To: Giles, Michael  
Subject: Fw: Lamborghini Laboratory Test Data

Mike , here's the Lambo data. Passes but FE is off. We can talk after you've looked it over.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
----- Forwarded by Jim Snyder/AA/USEPA/US on 03/29/2012 10:01 AM -----

From: Vincent Mazaitis/AA/USEPA/US  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 03/29/2012 06:58 AM  
Subject: Lamborghini Laboratory Test Data

Jim,

Official results are in Verify.

Vince Mazaitis



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Thur 3/29/2012 5:05:11 PM  
**Subject:** VW Group - Decision Information VID D3UJ-S7Q

Hello Jim,

I submitted Tests and Decision Information for the following test group and VIDs representing new 4.0L TFSI V8 FEDVs. Manufacturer Confirmatory tests for both configurations are required due to high fuel economy for the ETW.

Test Group: DADXV04.03UJ

D3UJ-S7Q, Configuration 0 (Audi S7 – No Start-stop)

D3UJ-S7Q, Configuration 1 (Audi S6 – No Start-stop)

**To:** Jim Snyder/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; inccent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Thur 3/29/2012 6:30:14 PM  
**Subject:** RE: Lamborghini Laboratory Test Data  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Hi Jim and Vincent,

Lamborghini is \*not\* requesting a re-test. Therefore, we would like to know when the vehicle can be released. We will be making the transportation arrangements soon. Please advise.

Lastly, thanks again for your help and the tour yesterday, it was appreciated by all.

Regards

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, March 29, 2012 10:03 AM  
To: Giles, Michael  
Subject: Fw: Lamborghini Laboratory Test Data

Mike , here's the Lambo data. Passes but FE is off. We can talk after you've looked it over.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov  
----- Forwarded by Jim Snyder/AA/USEPA/US on 03/29/2012 10:01 AM -----

From: Vincent Mazaitis/AA/USEPA/US  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 03/29/2012 06:58 AM  
Subject: Lamborghini Laboratory Test Data

Jim,

Official results are in Verify.

Vince Mazaitis

**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William" [William.Rodgers@vw.com]; Rodgers, William" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 3/29/2012 6:39:29 PM  
**Subject:** RE: Lamborghini Laboratory Test Data  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Ok Mike, we'll take care of it. I'll ask about the canister re-filling hose.

I did check with the lab regarding the 0 Nox. Both the Quality guy and the lab engineer re-reviewed it and it all looks legitimate.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 03/29/2012 02:30 PM  
Subject: RE: Lamborghini Laboratory Test Data

Hi Jim and Vincent,

Lamborghini is \*not\* requesting a re-test. Therefore, we would like to know when the vehicle can be released. We will be making the transportation arrangements soon. Please advise.

Lastly, thanks again for your help and the tour yesterday, it was appreciated by all.

Regards  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, March 29, 2012 10:03 AM  
To: Giles, Michael  
Subject: Fw: Lamborghini Laboratory Test Data

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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov  
----- Forwarded by Jim Snyder/AA/USEPA/US on 03/29/2012 10:01 AM -----

From: Vincent Mazaitis/AA/USEPA/US  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 03/29/2012 06:58 AM  
Subject: Lamborghini Laboratory Test Data

Jim,

Official results are in Verify.

Vince Mazaitis

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Thur 3/29/2012 7:02:25 PM  
**Subject:** RE: VW confirmatory results  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[mailto:Snyder.Jim@epamail.epa.gov](mailto:mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Jim,

This one is still in discussion, we hope to let you know tomorrow.

Thanks,

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, March 29, 2012 2:56 PM  
To: Giles, Michael  
Subject: RE: VW confirmatory results

Any word on the Audi "Beetle" ? Should I reschedule a hwy and US06 or will accept initial results?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 03/29/2012 07:45 AM  
Subject: RE: VW confirmatory results

Thanks Jim!

Regards,  
Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, March 28, 2012 4:30 PM  
To: Giles, Michael  
Cc: Vincent Mazaitis  
Subject: VW confirmatory results

Mike, here's the data. Its also in Verify. Don't get too used to this fast turnaround, its not typical.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Lynn Sohacki/AA/USEPA/US@EPA; Bernd Liebner/AA/USEPA/US@EPA[]; ernd Liebner/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Fri 3/30/2012 8:18:15 PM  
**Subject:** EPA Surveillance Programm 9AD XV03.23LC - 3.2l AVS MY 2009  
parameters form\_WAUDK78TX9A025592\_R105RXX-0024.xlsx  
sebastian.berenz@vw.com

Hello Lynn,

Yesterday we inspected the two Audi A5s in your lab.

Both seemed to be alright. But one turned out to me a manual 6-speed instead of an automatic.

Therefore I have to change the parameter sheet.

Please use the attached version for vehicle Ex. 6

The shift schedule is the standard EPA 6-speed schedule.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>



P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number:

Equivalent Test Weight:  Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:  Gallons 40% Fill  Gallons

Drive Axle:  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06  
*Please use EPA standard 6-speed shift scheduel.*

Vehicle Target Road-Load Coefficients

A  Lb-force

B  Lb-force\*mpH

C  Lb-force\*mpH<sup>2</sup>

Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

### For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Audi A5 Sedan 1/31/2012  
34459mi manual

9ADXT03.23LC wrong, it's not a truck  
9ADXR0140BBQ

Bin5 LEV2

VL	245/45 R18 DOT	3608
HL	245/45 R18 DOT	4208
HR	245/45 R18 DOT	4208
VR	245/45 R18 DOT	4208

**To:** "Berenz, Sebastian" [Sebastian.Berenz@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Fri 3/30/2012 8:40:30 PM  
**Subject:** Re: EPA Surveillance Program 9AD XV03.23LC - 3.2I AVS MY 2009  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Thanks, Sebastian. Have a good weekend!

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Berenz, Sebastian" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA, Bernd Liebner/AA/USEPA/US@EPA  
Date: 03/30/2012 04:18 PM  
Subject: EPA Surveillance Programm 9AD XV03.23LC - 3.2I AVS MY 2009

Hello Lynn,

Yesterday we inspected the two Audi A5s in your lab.  
Both seemed to be alright. But one turned out to be a manual 6-speed instead of an automatic.  
Therefore I have to change the parameter sheet.

Please use the attached version for vehicle: R105RXX-0024  
The shift schedule is the standard EPA 6-speed schedule.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!  
[attachment "parameters form\_**Ex. 6**" R105RXX-0024.xlsx" deleted by Lynn  
Sohacki/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** Vincent Mazaitis/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Mon 4/2/2012 12:49:03 PM  
**Subject:** VW Group - Eos Release VID CAD-3UA  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

We will accept the tests that were performed last week on the VW Eos VID CAD-3UA. Please release the vehicle for pick up.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** Vincent Mazaitis/AA/USEPA/US@EPA;"Giles, Michael" [michael.giles@vw.com];  
Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Mon 4/2/2012 1:25:47 PM  
**Subject:** RE: VW Group - Eos Release VID CAD-3UA  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Jim/Vince,

We have confirmed that we will pick up both the Lamborghini Aventador and VW Eos test vehicles today.  
Please provide Security with the keys for our driver.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Rodgers, William  
Sent: Monday, April 02, 2012 8:49 AM  
To: 'Jim Snyder' (Snyder.Jim@epamail.epa.gov)  
Cc: Mazaitis.Vincent@epamail.epa.gov  
Subject: VW Group - Eos Release VID CAD-3UA

Hello Jim,

We will accept the tests that were performed last week on the VW Eos VID CAD-3UA. Please release the vehicle for pick up.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

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Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



**To:** "Berenz, Sebastian" [Sebastian.Berenz@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Mon 4/2/2012 4:01:07 PM  
**Subject:** Re: FW: In-use vehicles scheduled for next week - Correction  
[parameters form Ex. 6 R104RXX-0050.xlsx](#)  
[parameters form Ex. 6 R105RXX-0024.xlsx](#)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>

Hi, Sebastian.

Vehicle R105-0024 is a manual transmission vehicle. What would the shift schedules be for it?

Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

**From:** "Berenz, Sebastian" <Sebastian.Berenz@vw.com>  
**To:** Lynn Sohacki/AA/USEPA/US@EPA  
**Date:** 03/22/2012 09:41 AM  
**Subject:** FW: In-use vehicles scheduled for next week - Correction

Sorry Lynn,

But I had the wrong weight in the sheet. Both vehicles are automatics according to our information and run in the 4000 pound class.

Please use these ones.

Sorry for that.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
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FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Berenz, Sebastian  
Sent: Thursday, March 22, 2012 9:20 AM  
To: Lynn Sohacki (Sohacki.Lynn@epamail.epa.gov)  
Subject: In-use vehicles scheduled for next week

Hello Lynn,

Attached you will find the test requests for the two Audi A5s for test group 9AD XV03.23LC.

We will be at your laboratory on Thursday, 29th of March at 10am to inspect both cars.

Let me know if you have any questions.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

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# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

**EPA Vehicle Control Number:**

**Equivalent Test Weight:**  Pounds (Integer Only: Equivalent Test Weight)

**Nominal Fuel Tank Capacity:**  Gallons **40% Fill**  Gallons

**Drive Axle:**  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

**Mfr. Shift Schedule (if required)**  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

**A**  Lb-force

**B**  Lb-force\*mpH

**C**  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

**Canister Loading Process:**

**Fuel Draining Process:**

**ABS Disabling Process:**

**Fuel Switch Process (Flex Fuel only):**

**Comments:**

### For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Audi A5 Sedan 1/31/2012  
34459mi manual

9ADXT03.23LC wrong, it's not a truck  
9ADXR0140BBQ

Bin5 LEV2

VL	245/45 R18 DOT	3608
HL	245/45 R18 DOT	4208
HR	245/45 R18 DOT	4208
VR	245/45 R18 DOT	4208



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number:

Equivalent Test Weight:  Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:  Gallons 40% Fill  Gallons

Drive Axle:  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

A  Lb-force

B  Lb-force\*mpH

C  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

### For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Audi A5 Sedan 1/31/2012  
34459mi manual

9ADXT03.23LC wrong, it's not a truck  
9ADXR0140BBQ

Bin5 LEV2

VL	245/45 R18 DOT	3608
HL	245/45 R18 DOT	4208
HR	245/45 R18 DOT	4208
VR	245/45 R18 DOT	4208

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Mon 4/2/2012 4:11:05 PM  
**Subject:** RE: FW: In-use vehicles scheduled for next week - Correction  
parameters form 

Ex. 6	R105RXX-0024.xlsx
-------	-------------------

  
parameters form 

Ex. 6	R104RXX-0050.xlsx
-------	-------------------

  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
[Sebastian.Berenz@vw.com](mailto:Sebastian.Berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>  
[Sohacki.Lynn@epamail.epa.gov](mailto:Sohacki.Lynn@epamail.epa.gov)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>  
[image001.gif](#)

Hello Lynn,

For vehicle R105-0024 please use the standard EPA 6-speed shift schedule. (see attached parameter sheet that I corrected on Friday)

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Monday, April 02, 2012 12:01 PM  
To: Berenz, Sebastian  
Subject: Re: FW: In-use vehicles scheduled for next week - Correction

Hi, Sebastian.

Vehicle R105-0024 is a manual transmission vehicle. What would the shift schedules be for it?

Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

"Berenz, Sebastian" ---03/22/2012 09:41:18 AM---Sorry Lynn, But I had the wrong weight in the sheet. Both vehicles are automatics according to our i

From: "Berenz, Sebastian" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 03/22/2012 09:41 AM  
Subject: FW: In-use vehicles scheduled for next week - Correction

Sorry Lynn,

But I had the wrong weight in the sheet. Both vehicles are automatics according to our information and run in the 4000 pound class.

Please use these ones.

Sorry for that.

Best regards

Sebastian Berenz



Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Berenz, Sebastian  
Sent: Thursday, March 22, 2012 9:20 AM  
To: Lynn Sohacki (Sohacki.Lynn@epamail.epa.gov)  
Subject: In-use vehicles scheduled for next week

Hello Lynn,

Attached you will find the test requests for the two Audi A5s for test group 9AD XV03.23LC.

We will be at your laboratory on Thursday, 29th of March at 10am to inspect both cars.

Let me know if you have any questions.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
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E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

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(See attached file: parameters form\_ **Ex. 6** .xlsx)(See attached file: parameters form\_ **Ex. 6** .xlsx)



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number:

Equivalent Test Weight:  Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:  Gallons 40% Fill  Gallons

Drive Axle:  (Select number from list below )

- 1 Rear Drive Str Left
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- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06  
*Please use EPA standard 6-speed shift scheduel.*

### Vehicle Target Road-Load Coefficients

A  Lb-force

B  Lb-force\*mpH

C  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

### For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Audi A5 Sedan 1/31/2012  
34459mi manual

9ADXT03.23LC wrong, it's not a truck  
9ADXR0140BBQ

Bin5 LEV2

VL	245/45 R18 DOT	3608
HL	245/45 R18 DOT	4208
HR	245/45 R18 DOT	4208
VR	245/45 R18 DOT	4208



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

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- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

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C  Lb-force\*mpH<sup>2</sup>

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Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

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### For internal EPA Use Only:

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(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Audi A5 Sedan 1/31/2012  
34459mi manual

9ADXT03.23LC wrong, it's not a truck  
9ADXR0140BBQ

Bin5 LEV2

VL	245/45 R18 DOT	3608
HL	245/45 R18 DOT	4208
HR	245/45 R18 DOT	4208
VR	245/45 R18 DOT	4208

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Mon 4/2/2012 6:09:02 PM  
**Subject:** VW Group - Supplemental Information for VID D3UJ-DAQ  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Jim,

I submitted the SI for the Audi A8 4.0T, VID D3UJ-DAQ. Please proceed with scheduling the test for May 9 if possible. This will help us coordinate with the other Audi test (VID D3UF-DAQ) we have scheduled that day. Please let me know as soon as possible given the short time for vehicle shipping.

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Tue 4/3/2012 4:43:48 PM  
**Subject:** VW Group - Decision Information Submissions For Audi 2.0L TFSI Test Group DAD XV02.03UB  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I submitted to VERIFY the Tests and Decision Information for the following Vehicle IDs in the gasoline fueled test group DAD XV02.03UB.

I included the comments from our Input xml files. Note, the VERIFY system is stripping out the comments when it generates our Report xml files.

These tests are for the same 2.0L TFSI models as 2012, but with new software and tests to optimize fuel economy. Please let me know if you have questions.

di-DFUB-BAQ,\_Configuration-0

This represents the 2013 Audi A4 Sedan quattro / A5 Coupe quattro as FEDV models. No new technology exists. Manuf. Confirmatory tests for FTP/HWY are required for high MPG for the ETA

di-DFUB-BAQ,\_Configuration-1

This represents the 2013 Audi A5 Cabrio quattro as the worst case EDV for this test group. No new technology exists. Manuf. Confirmatory tests for FTP/HWY are required for high MPG for the ETA

di-DFUB-BAA,\_Configuration-0

Represents 2013 Audi A4 allroad quattro as a FEDV. No new technology included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW

di-D3UB-BMQ,\_Configuration-0

Represents 2013 Audi A4 quattro with manual transmission as a FEDV. No new technology included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW

di-D3UB-BMQ,\_Configuration-1

Represents 2013 Audi A5 Coupe quattro with manual transmission as a FEDV. No new technology included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW



di-D3UB-BAF,\_Configuration-0

Represents 2013 Audi A4 FWD with CVT trans as a FEDV. No new technology included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW

di-D3UB-BAF,\_Configuration-1

Represents 2013 Audi A5 Cabrio FWD with CVT trans as a FEDV. No new technology included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 4/3/2012 9:23:30 PM  
**Subject:** Re: VW Group - Decision Information Submissions For Audi 2.0L TFSI Test Group DAD XV02.03UB  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Thanks, this is especially helpful given the Verify problem. Regarding the A8 testing, I am planning to test for PM since its an all new engine.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>  
Date: 04/03/2012 12:43 PM  
Subject: VW Group - Decision Information Submissions For Audi 2.0L TFSI Test Group DAD XV02.03UB

Hello Jim,  
I submitted to VERIFY the Tests and Decision Information for the following Vehicle IDs in the gasoline fueled test group DAD XV02.03UB.  
I included the comments from our Input xml files. Note, the VERIFY system is stripping out the comments when it generates our Report xml files.  
These tests are for the same 2.0L TFSI models as 2012, but with new software and tests to optimize fuel economy. Please let me know if you have questions.

di-DFUB-BAQ\_Configuration-0

This represents the 2013 Audi A4 Sedan quattro / A5 Coupe quattro as FEDV models. No new technology exists. Manuf. Confirmatory tests for FTP/HWY are required for high MPG for the ETA

di-DFUB-BAQ\_Configuration-1

This represents the 2013 Audi A5 Cabrio quattro as the worst case EDV for this test group. No new technology exists. Manuf. Confirmatory tests for FTP/HWY are required for high MPG for the ETA

di-DFUB-BAA\_Configuration-0

Represents 2013 Audi A4 allroad quattro as a FEDV. No new technology included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW

di-D3UB-BMQ\_Configuration-0

Represents 2013 Audi A4 quattro with manual transmission as a FEDV. No new technology included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW

di-D3UB-BMQ\_Configuration-1

Represents 2013 Audi A5 Coupe quattro with manual transmission as a FEDV. No new technology

included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW

di-D3UB-BAF,\_Configuration-0

Represents 2013 Audi A4 FWD with CVT trans as a FEDV. No new technology included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW

di-D3UB-BAF,\_Configuration-1

Represents 2013 Audi A5 Cabrio FWD with CVT trans as a FEDV. No new technology included. Manuf. Confirmatory tests FTP/HWY are required because of high MPG for the ETW

Regards,

Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office  
3800 Hamlin Rd.  
Auburn Hills, MI 48436  
United States  
office (248) 754-4219  
fax (248) 754-4207  
william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard" [Leonard.Kata@vw.com]; Giles, Michael" [michael.giles@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Wed 4/4/2012 1:09:15 PM  
**Subject:** VW Group - Audi A8 Test Drive  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

We would like to schedule time at your facility on Tuesday afternoon May 8th to allow you and EPA staff to test drive a 2013 Audi A8 4.0L V8 equipped with Start-Stop and Cylinder Deactivation technologies. We plan to have Audi Engineers available during the time of the test drives to answer any questions that you or other staff may have. Please let us know if this date is acceptable and what block of time will work best for you. As you know, Audi representatives will already be at EPA for confirmatory testing the morning of May 8 and 9th so either afternoon is acceptable for us. An alternative might be Monday May 7th after we deliver the test vehicle but the fore mentioned dates are preferred.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

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**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=David  
Good/OU=AA/O=USEPA/C=US@EPA;CN=DavidA  
Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc  
Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Martin  
Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Stephen  
Healy/OU=AA/O=USEPA/C=US@EPA;CN=William  
Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; N=David  
Good/OU=AA/O=USEPA/C=US@EPA;CN=DavidA  
Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc  
Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Martin  
Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Stephen  
Healy/OU=AA/O=USEPA/C=US@EPA;CN=William  
Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; N=DavidA  
Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc  
Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Martin  
Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Stephen  
Healy/OU=AA/O=USEPA/C=US@EPA;CN=William  
Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; N=Joel  
Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc  
Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Martin  
Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Stephen  
Healy/OU=AA/O=USEPA/C=US@EPA;CN=William  
Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; N=Joel  
Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc  
Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Martin  
Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Stephen  
Healy/OU=AA/O=USEPA/C=US@EPA;CN=William  
Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; N=Linc  
Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Martin  
Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Stephen  
Healy/OU=AA/O=USEPA/C=US@EPA;CN=William  
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Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; N=Stephen  
Healy/OU=AA/O=USEPA/C=US@EPA;CN=William  
Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; N=William  
Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; illiam.Rodgers@vw.com[]  
**Cc:** Leonard.Kata@vw.com;michael.giles@vw.com[]; ichael.giles@vw.com[]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 4/4/2012 2:25:28 PM  
**Subject:** VW Group - Audi A8 w/Start/Stop and Cyl Deacitvation Test Drive  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

I reserved a room in case we want an pre-drive intro but primary a test drive opportunity of the Audi S/S system .

---

Hello Jim,

We would like to schedule time at your facility on Tuesday afternoon May 8th to allow you and EPA staff to test drive a 2013 Audi A8 4.0L V8 equipped with Start-Stop and Cylinder Deactivation technologies. We plan to have Audi Engineers available during the time of the test drives to answer any questions that you or other staff may have. Please let us know if this date is acceptable and what block of time will work best for you. As you know, Audi representatives will already be at EPA for confirmatory testing the morning of May 8 and 9th so either afternoon is acceptable for us. An alternative might be Monday May 7th after we deliver the test vehicle but the fore mentioned dates are preferred.

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Bill Rodgers

Emissions Certification Engineer

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office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=David  
Good/OU=AA/O=USEPA/C=US@EPA;CN=DavidA  
Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc  
Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Martin  
Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Stephen  
Healy/OU=AA/O=USEPA/C=US@EPA;CN=William  
Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; N=David  
Good/OU=AA/O=USEPA/C=US@EPA;CN=DavidA  
Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc  
Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Martin  
Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Stephen  
Healy/OU=AA/O=USEPA/C=US@EPA;CN=William  
Ott/OU=AA/O=USEPA/C=US@EPA;William.Rodgers@vw.com[]; N=DavidA  
Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
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Regards,

Bill Rodgers

Emissions Certification Engineer

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**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Wed 4/4/2012 2:54:47 PM  
**Subject:** Accepted: VW Group - Audi A8 w/Start/Stop and Cyl Deactivation Test Drive

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Wed 4/4/2012 4:49:02 PM  
**Subject:** Tentative: VW Group - Audi A8 w/Start/Stop and Cyl Deactivation Test Drive

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Tue 4/10/2012 3:21:57 PM  
**Subject:** Notification of a new in-use surveillance test class R136  
[NOTIF-R-136-Volkswagen.pdf](#)

Dear Sebastian,

Attached is a letter that was sent to your company announcing the selection of an EPA in-use surveillance test class. Please let me know if you have any questions.

Thanks,

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY  
2565 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105-2498

April 9, 2012

OFFICE OF  
AIR AND RADIATION

Mr. Dennis Reineke  
Volkswagen of America  
3800 Hamlin Rd.,  
Auburn Hills, Michigan 48326

Dear Mr. Reineke,

The Environmental Protection Agency will test a 2010 model-year Volkswagen test-group in our surveillance test-program. The group shown in Enclosure 1 will be tested at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. Test results which exceed applicable standards may lead to confirmatory testing.

A sample of three or more vehicles will be procured. Maintenance will consist of an under-hood inspection and review of on-board computer codes. The federal test procedure, highway cycle and US06 will follow a single LA-4 preconditioning cycle. If this test-group contains models which are equipped with 4WD or AWD, the vehicles may be tested in either of these modes.

One vehicle may be subjected to an evaporative test per class. Additionally, fault conditions may be introduced on one or more of the vehicles to test the response of the On-Board Diagnostics (OBD) system. If you are aware of OBD enabling criteria which would limit our ability to evaluate these systems, please inform me. Copies of the OBD enabling criteria which were approved during certification should be provided if there are such limitations.

We invite your representatives to be present as observers during the test program. If you have any questions concerning this investigation please contact me.

Sincerely,

A handwritten signature in cursive script, reading "Lynn Sohacki".

Lynn Sohacki  
Compliance and Innovative Strategies Division

Enclosure



ENCLOSURE 1

<u>Lab</u>	NVFEL Ann Arbor, Michigan
<u>Test Group</u>	AVWXV02.5259
<u>Estimated Start Date</u>	Week-ending <b>June 1, 2012</b>
<u>Recall/Testing Representative</u>	Lynn Sohacki
<u>Telephone Number</u>	(734) 214-4851
<u>E-mail address</u>	Sohacki.lynn@epa.gov
<u>Class Numbers</u>	<b>R136/R137</b> (low-mileage / high-mileage)

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Tue 4/10/2012 3:33:32 PM  
**Subject:** RE: Notification of a new in-use surveillance test class R136  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

Thank you very much for the information.

Please let me know when the first vehicles comes in.

Also do you have any results of the 3.2l Audis?

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

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From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Tuesday, April 10, 2012 11:22 AM  
To: Berenz, Sebastian  
Subject: Notification of a new in-use surveillance test class R136

Dear Sebastian,

Attached is a letter that was sent to your company announcing the selection of an EPA in-use surveillance test class. Please let me know if you have any questions.

Thanks,

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: NOTIF-R-136-Volkswagen.pdf)


**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Tue 4/10/2012 4:42:51 PM  
**Subject:** Test data for in-use vehicle  
R105RXX-0024.pdf

Hi, Sebastian.

The data for the above vehicle is attached. Please give me a call if you have any questions.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

0190

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results							
Test Number: 2012-0161-002			Vehicle ID: R105RXX-0024				
	Test Date: 4/5/2012		MFR Name: AUDI		MFR Codes: 640 ADX		
	Key Start / Hot Soak: 06:41:02 / 09:36		Config #: 00				
	Fuel Container ID: F00023		Transmission: MANUAL				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Shift Schedule: A09980004				
	Test Procedure: 21 Fed Fuel 2-day Exhaust (CAN LOAD)(ftp)		Beginning Odometer: 054900.0 MI				
	Calculation Method: Gasoline		Drive Schedule: ftp3bag				
Pretest Remarks:			Soak Period: 16.3 hours				
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	20.863	24.466	1.867	1.085	2.837		
Ambient	2.361	0.000	0.019	0.044	1.939		
Net Concentration	18.694	24.466	1.849	1.045	1.056	17.443	
Remarks:							
<b>Phase 2</b>							
Sample	2.292	0.297	0.410	0.765	1.844		
Ambient	2.398	0.000	0.013	0.043	1.937		
Net Concentration	0.030	0.297	0.398	0.724	0.018	0.009	
Remarks:							
<b>Phase 3</b>							
Sample	5.111	6.590	1.224	0.938	2.001		
Ambient	2.398	0.000	0.016	0.044	1.931		
Net Concentration	2.881	6.590	1.208	0.898	0.205	2.638	
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.241	0.638	0.072	428.1	0.016	0.225	20.765
Phase 2	0.001	0.012	0.024	470.0	0.000	0.000	18.990
Phase 3	0.037	0.171	0.047	366.0	0.003	0.034	24.358
Weighted	0.06046	0.18536	0.04023	432.752	0.00432	0.05603	
<b>Fuel Economy</b>	<u>Gasoline MPG</u>	<u>Dyno Settings</u>					<u>Dyno #:</u> D329 - AWD
Phase 1	20.72						Inertia: 4000
Phase 2	18.95						EPA Set Co A: 5.45
Phase 3	24.30						EPA Set Co B: -0.1349
							EPA Set Co C: 0.0188
Weighted	20.54						Emiss-Bench: Mexa 7200sle

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0161-002

Vehicle ID: R105RXX-0024

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.863	2.280	0.256	1529.5	0.056	0.805	1.185
Phase 2	0.002	0.047	0.094	1810.3	0.002	0.001	
Phase 3	0.133	0.613	0.167	1311.2	0.011	0.121	

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.05	29.05	29.07	
Avg Cell Temp (degF)	72.34	72.08	71.81	
Dew Point (degF)	48.86	48.31	48.54	
Specific Humidity (grains/lbm)	52.86	51.75	52.17	
NOx Corr Factor	0.9058	0.9015	0.9031	
CO2 Dilution Factor	12.304	17.514	14.266	
CFV Vmix (scf @68F)	2826.11	4826.43	2819.61	
CVS Flow Rate Avg (scfm)	334.12	333.01	333.62	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.50	869.60	507.10	
Distance (miles)	3.573	3.852	3.582	
Bag Analysis Time (secs)	879.1	1100.0	161.4	

CISD

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0161-003

Vehicle ID: R105RXX-0024

### Test Information



Test Date: 4/5/2012

Key Start: 07:52:45

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Test Fuel

Test Procedure: 03 HWFET (hwfetprep\_hwfet)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: AUDI

MFR Codes: 640 ADX

Config #: 00

Transmission: MANUAL

Shift Schedule: A09980010

Beginning Odometer: 054911.0 MI

Drive Schedule: hwfet\_hwfet

### Bag Data

#### Phase 1

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Sample	3.181	12.975	0.259	1.152	1.968	
Ambient	2.403	0.000	0.010	0.044	1.929	
Net Concentration	0.985	12.975	0.249	1.112	0.205	0.742

Remarks:

#### Phase 2

Sample  
Ambient  
Net Concentration

Remarks:

#### Phase 3

Sample  
Ambient  
Net Concentration

Remarks:

#### Phase 4

Sample  
Ambient  
Net Concentration

Remarks:

### Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC (gpm)	Vol MPG (mpg)
Phase 1	0.007	0.176	0.005	237.4	0.002	0.005	37.552

### Fuel Economy

Gasoline MPG

Phase 1 37.47

### Dyno Settings

Dyno #: D329 - AWD

Inertia: 4000

EPA Set Co A: 5.45

EPA Set Co B: -0.1349

EPA Set Co C: 0.0188

Emiss-Bench: Mexa 7200sle

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0161-003

Vehicle ID: R105RXX-0024

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.068	1.805	0.051	2430.5	0.016	0.051	1.185

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.08			
Avg Cell Temp (degF)	72.34			
Dew Point (degF)	48.10			
Specific Humidity (grains/lbm)	51.28			
NOx Corr Factor	0.8997			
CO2 Dilution Factor	11.617			
CFV Vmix (scf @68F)	4218.66			

CVS Flow Rate Avg (scfm) 330.83

Fan Placement: One Fan - Up - Front

Phase Time (secs)	765.10
Distance (miles)	10.239
Bag Analysis Time (secs)	145.6



**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Tue 4/10/2012 6:18:30 PM  
**Subject:** RE: Test data for in-use vehicle  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

This one passed right away and looked pretty good from my end.

Please let me know when you have the result of the last vehicle.

Thank you very much.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Tuesday, April 10, 2012 12:43 PM  
To: Berenz, Sebastian  
Subject: Test data for in-use vehicle

Hi, Sebastian.

The data for the above vehicle is attached. Please give me a call if you have any questions.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: R105RXX-0024.pdf)

**To:** "Thomas, Richard" [Richard.Thomas@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 4/11/2012 2:06:05 PM  
**Subject:** 3.0L A8 timing

I talked to Ben Haynes in the lab and he is willing to consider moving up the 3.0L A8 if you give us some idea of when it could be available.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Wed 4/11/2012 3:27:25 PM  
**Subject:** RE: 3.0L A8 timing  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Hi Jim;

Thanks for checking but, I spoke with Germany this morning and they have to stay with the current schedule. We hope to deliver the car on Monday, April 30th with first test scheduled for May 2nd.

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

From: Jim Snyder [<mailto:Snyder.Jim@epamail.epa.gov>]  
Sent: Wednesday, April 11, 2012 10:06 AM  
To: Thomas, Richard (EEO)  
Subject: 3.0L A8 timing

I talked to Ben Haynes in the lab and he is willing to consider moving up the 3.0L A8 if you give us some idea of when it could be available.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 4/11/2012 9:09:56 PM  
**Subject:** RE: VW Group - Certificate Requests for Audi 2.0L TFSI  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

I'll try for thurs if I get time , if not, then monday.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Rodgers, William" <William.Rodgers@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** "Giles, Michael" <michael.giles@vw.com>  
**Date:** 04/11/2012 12:59 PM  
**Subject:** RE: VW Group - Certificate Requests for Audi 2.0L TFSI

Yes the Audi application is a higher priority now.  
Thanks,  
Bill

**From:** Jim Snyder [mailto:[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)]  
**Sent:** Wednesday, April 11, 2012 12:21 PM  
**To:** Rodgers, William  
**Subject:** RE: VW Group - Certificate Requests for Audi 2.0L TFSI

I was working on the Bugatti cert. Would you prefer I focus on the Audis instead?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Rodgers, William" <William.Rodgers@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 04/11/2012 11:36 AM  
**Subject:** RE: VW Group - Certificate Requests for Audi 2.0L TFSI

Hi Jim,

Is there any possibility to get the certificates requested on April 5th for test group DAD XV02.03UB by early next week?

We've got a small dealer demo fleet that the Sales Dept. wants to release to dealers earlier than expected.

Thanks,

Bill

From: Rodgers, William

Sent: Thursday, April 05, 2012 4:26 PM

To: 'Jim Snyder' (Snyder.Jim@epamail.epa.gov)

Subject: VW Group - Certificate Requests for Audi 2.0L TFSI

Hi Jim,

I submitted the Initial Application and following Certificate Requests for the Audi 2.0L TFSI (non-FFV) Test Group DAD XV02.03UB. I erroneously indicated a conditional certificate for the evaporative family 140C7A, when in fact it uses carryover test data from 2012.

cert\_request\_DAD XV02.03UB\_DAD XR0140B8A – conditional pending manufacturer confirmatory tests for high fuel economy.

cert\_request\_DAD XV02.03UB\_DAD XR0140C7A

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.

Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Thur 4/12/2012 10:45:44 AM  
**Subject:** RE: VW Group - Certificate Requests for Audi 2.0L TFSI  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[mailto:Snyder.Jim@epamail.epa.gov](mailto:mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Very good. Thanks for the help.

Bill

From: Jim Snyder [<mailto:Snyder.Jim@epamail.epa.gov>]  
Sent: Wednesday, April 11, 2012 5:10 PM  
To: Rodgers, William  
Subject: RE: VW Group - Certificate Requests for Audi 2.0L TFSI

I'll try for thurs if I get time , if not, then monday.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William" <[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>  
Date: 04/11/2012 12:59 PM  
Subject: RE: VW Group - Certificate Requests for Audi 2.0L TFSI

Yes the Audi application is a higher priority now.  
Thanks,  
Bill

From: Jim Snyder [<mailto:Snyder.Jim@epamail.epa.gov>]

Sent: Wednesday, April 11, 2012 12:21 PM  
To: Rodgers, William  
Subject: RE: VW Group - Certificate Requests for Audi 2.0L TFSI

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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 04/11/2012 11:36 AM  
Subject: RE: VW Group - Certificate Requests for Audi 2.0L TFSI

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Thanks,  
Bill

From: Rodgers, William  
Sent: Thursday, April 05, 2012 4:26 PM  
To: 'Jim Snyder' (Snyder.Jim@epamail.epa.gov)  
Subject: VW Group - Certificate Requests for Audi 2.0L TFSI

Hi Jim,  
I submitted the Initial Application and following Certificate Requests for the Audi 2.0L TFSI (non-FFV) Test Group DAD XV02.03UB. I erroneously indicated a conditional certificate for the evaporative family 140C7A, when in fact it uses carryover test data from 2012.

cert\_request\_DAD XV02.03UB\_DAD XR0140B8A – conditional pending manufacturer confirmatory tests for high fuel economy.  
cert\_request\_DAD XV02.03UB\_DAD XR0140C7A

Regards,



Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office  
3800 Hamlin Rd.  
Auburn Hills, MI 48436  
United States  
office (248) 754-4219  
fax (248) 754-4207  
william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Thur 4/12/2012 2:37:40 PM  
**Subject:** Test data for in-use vehicle R104-0050  
R104RXX-0050.pdf

Hi, Sebastian.

The data for the above vehicle is attached. Please give me a call if you have any questions.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

CIS

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0164-002

Vehicle ID: R104RXX-0050

### Test Information



Test Date: 4/10/2012  
Key Start / Hot Soak: 10:18:22 / 09:40

MFR Name: AUDI  
MFR Codes: 640 ADX

Fuel Container ID: F00023  
Fuel Type: 61 Tier 2 Cert Test Fuel

Config #: 00  
Transmission: AUTO

Test Procedure: 21 Fed Fuel 2-day Exhaust (CAN LOAD)(ftp  
Calculation Method: Gasoline

Shift Schedule: A09980005  
Beginning Odometer: 038566.0 MI

Pretest Remarks:

Drive Schedule: ftp3bag  
Soak Period: 20.0 hours

### Bag Data

#### Phase 1

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Sample	26.550	62.723	1.768	1.106	3.569	
Ambient	2.351	0.177	0.002	0.042	1.904	
Net Concentration	24.395	62.561	1.766	1.067	1.823	22.235

Remarks:

#### Phase 2

Sample	2.351	6.035	0.009	0.702	1.821	
Ambient	2.422	0.138	0.000	0.042	1.904	
Net Concentration	0.056	5.905	0.009	0.662	0.017	0.036

Remarks:

#### Phase 3

Sample	4.554	27.443	0.603	0.955	2.243	
Ambient	2.395	0.119	0.000	0.043	1.905	
Net Concentration	2.330	27.333	0.603	0.915	0.474	1.769

Remarks:

#### Phase 4

Sample  
Ambient  
Net Concentration

Remarks:

0.069

### Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC (gpm)	Vol MPG (mpg)
Phase 1	0.315	1.628	0.068	436.4	0.027	0.287	20.288
Phase 2	0.001	0.244	0.001	430.5	0.000	0.001	20.715
Phase 3	0.030	0.707	0.023	371.9	0.007	0.023	23.924
Weighted	0.07395	0.65823	0.02076	415.570	0.00777	0.06599	

### Fuel Economy

	Gasoline MPG	Dyno Settings	Dyno #:
Phase 1	20.24		D329 - AWD
Phase 2	20.67		Inertia: 4000
Phase 3	23.87		EPA Set Co A: -11.51
			EPA Set Co B: 0.3573
			EPA Set Co C: 0.01648
Weighted	21.34		Emiss-Bench: Mexa 7200sle

v101208 - d329 EPAVDAEm120410100900

Page 1 of 2

Print Time 11-Apr-2012 07:04

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0164-002

Vehicle ID: R104RXX-0050

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	1.122	5.807	0.243	1556.2	0.097	1.022	1.185
Phase 2	0.004	0.938	0.002	1652.2	0.002	0.003	
Phase 3	0.107	2.531	0.083	1331.5	0.025	0.081	

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.95	28.96	28.96	
Avg Cell Temp (degF)	71.99	72.36	72.50	
Dew Point (degF)	48.23	48.12	49.04	
Specific Humidity (grains/lbm)	51.77	51.56	53.37	
NOx Corr Factor	0.9016	0.9008	0.9077	
CO2 Dilution Factor	12.022	19.056	13.990	
CFV Vmix (scf @68F)	2815.44	4815.83	2808.81	
CVS Flow Rate Avg (scfm)	332.99	332.32	332.27	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.29	869.50	507.21	
Distance (miles)	3.566	3.838	3.581	
Bag Analysis Time (secs)	879.0	1104.1	161.4	

0150

**NVFEL Laboratory Test Data**  
**Final Laboratory Test Results**

**CVS**

**Test Information**



Test Number: 2012-0164-003  
 Test Date: 4/10/2012  
 Key Start: 12:49:13  
 Fuel Container ID: F00023  
 Fuel Type: 61 Tier 2 Cert Test Fuel  
 Test Procedure: 03 HWFET (hwfetprep\_hwfet)  
 Calculation Method: Gasoline  
 Pretest Remarks:

Vehicle ID: R104RXX-0050  
 MFR Name: AUDI  
 MFR Codes: 640 ADX  
 Config #: 00  
 Transmission: AUTO  
 Shift Schedule: A09980011  
 Beginning Odometer: 038578.0 MI  
 Drive Schedule: hwfet\_hwfet

**Bag Data**

	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample	3.764	19.804	0.254	0.880	2.055	
Ambient	2.342	0.000	0.000	0.042	1.904	
Net Concentration	1.576	19.804	0.253	0.840	0.277	1.248

Remarks:

**Phase 2**

Sample  
 Ambient  
 Net Concentration

Remarks:

**Phase 3**

Sample  
 Ambient  
 Net Concentration

Remarks:

**Phase 4**

Sample  
 Ambient  
 Net Concentration

Remarks:

**Results**

	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.015	0.390	0.007	260.2	0.003	0.012	34.213

**Fuel Economy**

Phase 1

Gasoline MPG  
 34.13

Dyno Settings

Dyno #: D329 - AWD  
 Inertia: 4000  
 EPA Set Co A: -11.51  
 EPA Set Co B: 0.3573  
 EPA Set Co C: 0.01648

Emiss-Bench: Mexa 7200sle

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0164-003

Vehicle ID: R104RXX-0050

### Results



	<u>HC-FID</u> (grams)	<u>CO</u> (grams)	<u>NOx</u> (grams)	<u>CO2</u> (grams)	<u>CH4</u> (grams)	<u>NMHC</u> (grams)	<u>Meth Response</u>
Phase 1	0.158	4.003	0.076	2668.1	0.032	0.125	1.185

### Test Conditions

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	28.97			
Avg Cell Temp (degF)	72.52			
Dew Point (degF)	48.53			
Specific Humidity (grains/lbm)	52.34			
NOx Corr Factor	0.9037			
CO2 Dilution Factor	15.194			
CFV Vmix (scf @68F)	6130.94			
CVS Flow Rate Avg (scfm)	480.80			
Fan Placement:	One Fan - Up - Front			
Phase Time (secs)	765.10			
Distance (miles)	10.254			
Bag Analysis Time (secs)	145.6			

CISD

## NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0164-004

Vehicle ID: R104RXX-0050

## Test Information

Test Date: 4/10/2012

MFR Name: AUDI

Key Start: 13:32:22

MFR Codes: 640

ADX

Fuel Container ID: F00023

Config #: 00

Fuel Type: 61 Tier 2 Cert Test Fuel

Transmission: AUTO

Test Procedure: 90 US06 (us06warmup\_us06)

Shift Schedule: A09980041

Calculation Method: Gasoline

Beginning Odometer: 038599.0 MI

Pretest Remarks:

Drive Schedule: us06\_us06



## Bag Data

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Phase 1						
Sample	3.714	31.724	1.066	1.104	1.904	
Ambient	2.516	0.000	0.000	0.043	1.904	
Net Concentration	1.405	31.724	1.066	1.065	0.158	1.218

Remarks:

## Phase 2

Sample  
Ambient  
Net Concentration

Remarks:

## Phase 3

Sample  
Ambient  
Net Concentration

Remarks:

## Phase 4

Sample  
Ambient  
Net Concentration

Remarks:

## Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC (gpm)	Vol MPG (mpg)
Phase 1	0.016	0.743	0.037	391.9	0.002	0.014	22.702

## Fuel Economy

Gasoline MPG  
Phase 1 22.65

## Dyno Settings

Dyno #: D329 - AWD

Inertia: 4000

EPA Set Co A: -11.51

EPA Set Co B: 0.3573

EPA Set Co C: 0.01648

Emiss-Bench: Mexa 7200sle

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0164-004

Vehicle ID: R104RXX-0050

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.130	5.942	0.296	3134.1	0.017	0.113	1.185

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.97			
Avg Cell Temp (degF)	72.17			
Dew Point (degF)	48.36			
Specific Humidity (grains/lbm)	52.00			
NOx Corr Factor	0.9025			
CO2 Dilution Factor	12.097			
CFV Vmix (scf @68F)	5680.68			
CVS Flow Rate Avg (scfm)	558.30			
Fan Placement: USO6 Only - One Large Fan - Up - Front				
Phase Time (secs)	610.50			
Distance (miles)	7.997			
Bag Analysis Time (secs)	155.6			



**To:** "Betanzos Mendoza, Victor" [victor.betanzos@vw.com.mx]  
**Cc:** CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Ed  
Nam/OU=AA/O=USEPA/C=US@EPA[]; N=Ed Nam/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Todd Sherwood/OU=AA/O=USEPA/C=US  
**Sent:** Fri 4/13/2012 6:40:04 PM  
**Subject:** Re: OBD regulations

While EPA does have light-duty OBD regulations, nearly all light-duty OBD systems in the US are built to comply with the California OBDII regulations. Those can be found here:  
<http://www.arb.ca.gov/msprog/obdprog/obdregs.htm>

If you really do want the EPA regulations, you can find them in 40 CFR 86.1806-05, to which I have provided a link here:  
<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=2af5c8cba23e912772e683f05ceba5f5&rgn=div8&view=text&node=40:19.0.1.1.1.13.1.11&idno=40>

.....  
Todd Sherwood  
United States Environmental Protection Agency  
2000 Traverwood, Ann Arbor, MI 48105, USA  
sherwood.todd@epa.gov  
+1.734.214.4405  
.....

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William"  
**Sent:** Fri 4/13/2012 7:01:48 PM  
**Subject:** FW: Certificate DAD XV02.03UB-011 with Evap Family DAD XR0140B8A has been issued

Hello Jim,

Thanks for pushing these Audi 2.0L certificates through on short notice.

To answer your phone message question regarding why they were requested as conditional, I requested them as conditional only because we have not yet completed the Manufacturer Confirmatory tests, required due to high fuel economy for the ETW. After I thought about it, perhaps a conditional certificate is not necessary since we are only confirming fuel economy and not emissions. What is correct on that?

Bill

-----Original Message-----

From: no-reply@epa.gov [mailto:no-reply@epa.gov]  
Sent: Friday, April 13, 2012 8:16 AM  
To: Rodgers, William; Giles, Michael; Hart, Robert (VWoA); VWoA EEO Government  
Subject: Certificate DAD XV02.03UB-011 with Evap Family DAD XR0140B8A has been issued

The following is a courtesy copy of status message for a Verify submission. Any references made to links refer to links which will appear in the CDX Inbox message.

Certificate Number DAD XV02.03UB-011 with Evaporative Family DAD XR0140B8A has been issued. A copy of the signed certificate is attached below.

The Verify submission this message relates to has the following values:

Test Group Name: DAD XV02.03UB

The following transaction identifier has been assigned to this request:

\_191c9fe0-55ab-4cae-b00c-3b33b1a2bcca

Please do not reply to this message.

---

Certificate Number DAD XV02.03UB-010 with Evaporative Family DAD XR0140C7A has been issued. A copy of the signed certificate is attached below.

The Verify submission this message relates to has the following values:

Test Group Name: DAD XV02.03UB

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]; Kata, Leonard"  
[Leonard.Kata@vw.com]  
**From:** "Rodgers, William"  
**Sent:** Mon 4/16/2012 5:58:34 PM  
**Subject:** VW Group - Request for AECD Approval  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

I have submitted to Verify two 2013 AECD approval requests for the following test groups. Please contact Len Kata or myself if you have any questions about these requests.

DVWXV02.0U5N – TDI (non-SCR)

DVWXV02.0U4S – TDI with SCR

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



**To:** "Beierschmitt, Thomas (T.A.)" [tbeiers1@ford.com]; 'Bill Pagels' [bill.pagels@meidenamerica.com]; 'Bob Maxwell' [remaxwell@comcast.net]; hris Nevers/AA/USEPA/US@EPA; "Dave Kosmalski" [david.kosmalski@gm.com]; 'Dave Kosmalski' [david.kosmalski@gm.com]; 'Dennis Pawlak' [Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid' [Douglas.Reid@na.mitsubishi-motors.com]; 'Duoba, Mike' [mduoba@anl.gov]; 'Jeff Foor' [jdf14@chrysler.com]; 'Jim Smith' [james.smith@chrysler.com]; im Snyder/AA/USEPA/US@EPA; "Keith Thompson" [Keith.Thompson@bepco.com]; 'Keith Thompson' [Keith.Thompson@bepco.com]; 'Kent Theil' [okt@chrysler.com]; 'kyle.bedsole@gm.com' [kyle.bedsole@gm.com]; 'Mahmoud Yassine' [mky@chrysler.com]; 'Marc Belzile' [marc.a.belzile@tc.gc.ca]; 'mark paxton' [mpaxton@ganassi.com]; 'MBrussow@sae.org' ['MBrussow@sae.org']; 'Meyer, Norm' [norm.meyer@tc.gc.ca]; Okawa, Naoyasu (N.) [okawa.n@mazda.co.jp]; 'Paulina.Carl@epamail.epa.gov' ['Paulina.Carl@epamail.epa.gov']; Peabody, Jason (J.A.) [jpeabod6@ford.com]; ete Janosi [petejanosi@yahoo.com]; Suanne.Thomas@vw.com [Suanne.Thomas@vw.com]; 'takashi\_a\_fujiwara@ahm.honda.com' [takashi\_a\_fujiwara@ahm.honda.com]; iffany Jackson [JacksT2@nrd.nissan-usa.com]; homas Schrodt/AA/USEPA/US@EPA; "tom.beierschmitt@tema.toyota.com" ['tom.beierschmitt@tema.toyota.com']; 'tom.beierschmitt@tema.toyota.com' ['tom.beierschmitt@tema.toyota.com']; 'tommy\_chang@ahm.honda.com' ['tommy\_chang@ahm.honda.com']; 'William Meschievitz' [william.meschievitz@tema.toyota.com]; 'Khan, Farrukh' [KhanF@NRD.NISSAN-USA.COM]

**Cc:** Carl Paulina/AA/USEPA/US@EPA]

**From:** "Glodich, Jeffrey (J.M.)"

**Sent:** Tue 4/17/2012 6:00:44 PM

**Subject:** Cancelled: J2951 Phase II Review

**Purpose:**

- Discuss implementation and macro issues
- Revisit deferred issues that were not addressed in the initial publication

**Meeting Info:**

**Ex. 6**

Web Address <https://www.connectmeeting.att.com><<https://www.connectmeeting.att.com>>

**Ex. 6**

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard"  
**Sent:** Thur 4/19/2012 5:59:45 PM  
**Subject:** Accepted: VW Group - Audi A8 w/Start/Stop and Cyl Deactivation Test Drive

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard"  
**Sent:** Fri 4/20/2012 1:22:03 PM  
**Subject:** Audi Start-Stop Demo

Hello Jim:

Hope all is well with you.

I was speaking with my Audi colleagues on Wednesday and they asked about the Audi start-stop demo drive that we have scheduled with EPA for early May. They asked if EPA has any particular topics or questions that they should be prepared to address. My understanding was that EPA staff mainly wanted a chance to drive the car. I suggested that they have a 2-3 slide overview just as a refresher.

Just so we can be appropriately prepared, are you expecting any more detailed discussion?

Best regards,

Len

---

Leonard W. Kata

Manager, Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Fri 4/20/2012 2:20:53 PM  
**Subject:** Re: Audi Start-Stop Demo

Hi Len, I looked through my file on previous S/S presentations and I don't see any technical info on how it works and the control conditons. We always ask for a list of inputs and parameters that enable / disable the S/S feature. Not just the parameter but the threshold constants ( such as coolant temp <40deg.). We want to make sure it is active under reasonable operating conditions. Also describe any special driving situations (like stop and go or panic stop) that will turn off the feature. Maybe you already presented some of this but I didn't find it in my notes.

I already reserved the lobby room so they can review how the feature works for say 20 minutes before we drive.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Kata, Leonard" <Leonard.Kata@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 04/20/2012 09:23 AM  
**Subject:** Audi Start-Stop Demo

Hello Jim:

Hope all is well with you.

I was speaking with my Audi colleagues on Wednesday and they asked about the Audi start-stop demo drive that we have scheduled with EPA for early May. They asked if EPA has any particular topics or questions that they should be prepared to address. My understanding was that EPA staff mainly wanted a chance to drive the car. I suggested that they have a 2-3 slide overview just as a refresher.

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Best regards,

Len

---

Leonard W. Kata  
Manager, Emission Regulations and Certification  
Engineering and Environmental Office



Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Mon 4/23/2012 7:37:38 PM  
**Subject:** VW Group - Decision Information Tiguan 4Motion

Hello Jim,

We have submitted vehicle information, test results and decision requests for the following:

MY 2013 Test Group DVWXJ02.03UA

Vehicle ID VW316 20145 (config. 0 & 1, see below)

Carline: Tiguan 4Motion carline

Configuration 0: (New worst case EDV) – with updated TCM software

Configuration 1: (FEDV with low roll tires) – with updated TCM software

We have not yet submitted a RC letter but would appreciate if you could notify us with decision information at your earliest convenience.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 4/26/2012 8:54:24 PM  
**Subject:** Re: VW Group - Request for AECD Approval  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hi Bill, just wanted to let you know I've been looking at the AECDs but won't finish until next week.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Kata, Leonard" <Leonard.Kata@vw.com>  
Date: 04/16/2012 01:59 PM  
Subject: VW Group - Request for AECD Approval

Hello Jim,  
I have submitted to Verify two 2013 AECD approval requests for the following test groups. Please contact Len Kata or myself if you have any questions about these requests.

DVWXV02.0U5N – TDI (non-SCR)  
DVWXV02.0U4S – TDI with SCR

Regards,

Bill Rodgers  
Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office  
3800 Hamlin Rd.  
Auburn Hills, MI 48436  
United States  
office (248) 754-4219  
fax (248) 754-4207  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** Chris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Martin Reineman/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schmidt, Oliver" [Oliver.Schmidt@vw.com]; avid Good/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Martin Reineman/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schmidt, Oliver" [Oliver.Schmidt@vw.com]; oel Ball/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Martin Reineman/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schmidt, Oliver" [Oliver.Schmidt@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Martin Reineman/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schmidt, Oliver" [Oliver.Schmidt@vw.com]; artin Reineman/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schmidt, Oliver" [Oliver.Schmidt@vw.com]; tephen Healy/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schmidt, Oliver" [Oliver.Schmidt@vw.com]; avidA Wright/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schmidt, Oliver" [Oliver.Schmidt@vw.com]; oel Dalton/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schmidt, Oliver" [Oliver.Schmidt@vw.com]; illiam Ott/AA/USEPA/US@EPA;"Schmidt, Oliver" [Oliver.Schmidt@vw.com]; Schmidt, Oliver" [Oliver.Schmidt@vw.com]; Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Kata, Leonard"  
**Sent:** Tue 5/1/2012 9:31:55 PM  
**Subject:** Meeting with Audi - Start-Stop Device  
[leonard.kata@vw.com](mailto:leonard.kata@vw.com)

Hi Jim:

Just to keep you informed, Audi is coming to the May 8 meeting prepared to provide a review of the system and respond to the points that you mentioned to me (i.e., enable conditions, operation during reasonable drive conditions, panic stop, stop-and-go traffic, etc).

As you know, we have some Audi confirmatory testing going on at EPA so the Audi personal already there will attend the meeting and be able to respond to any questions. Participants from our side include:

- Karlheinz Kissling (Audi AG)
- Carsten Stang (Audi AG)

- Andy Kramer (Audi AG)
- Mark Banzer (Audi AG)
- Oliver Schmidt (VWGoA – General Manager EEO)
- Leonard Kata (VWGoA)
- William Rodgers (VWGoA) (tentative)

Mr. Schmidt is my current Manager and successor to Christoph Kohnen. He would appreciate the opportunity to meet EPA staff involved in emission certification and policy at this meeting.

Let me know if you have any further questions.

Best regards,

Len

---

Leonard W. Kata

Manager, Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Wed 5/2/2012 7:02:45 PM  
**Subject:** VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

Hello Jim,

Today we submitted the initial application and certificate request for Test Group DAD XV04.23UL, evaporative family DAD XR0140B8A which is for the Audi RS5 / RS5 Cabriolet.

This is a new test group with a new EDV and a carryover evaporative family.

Please proceed with your review and let me know if you have any questions.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Wed 5/2/2012 7:11:33 PM  
**Subject:** RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

One detail I forgot to mention – the RS5 has short timing for us, so any priority you can give would be highly appreciated.

Thanks,

Mike

From: Giles, Michael  
Sent: Wednesday, May 02, 2012 3:03 PM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov)  
Cc: Rodgers, William  
Subject: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

Hello Jim,

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Mike

Michael Giles

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3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 5/2/2012 8:02:28 PM  
**Subject:** RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

I don't see it in Verify.  
Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William" <William.Rodgers@vw.com>  
Date: 05/02/2012 03:12 PM  
Subject: RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

One detail I forgot to mention – the RS5 has short timing for us, so any priority you can give would be highly appreciated.

Thanks,  
Mike

From: Giles, Michael  
Sent: Wednesday, May 02, 2012 3:03 PM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov)  
Cc: Rodgers, William  
Subject: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

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Regards,  
Mike  
Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.

3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Wed 5/2/2012 8:25:56 PM  
**Subject:** RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)

Hi Jim,

It should be there now – I submitted the request too soon after the application (VERIFY took longer to process the application so it rejected my first request).

Thanks

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, May 02, 2012 4:02 PM  
To: Giles, Michael  
Subject: RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

I don't see it in Verify.  
Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William" <William.Rodgers@vw.com>  
Date: 05/02/2012 03:12 PM  
Subject: RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

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Sent: Wednesday, May 02, 2012 3:03 PM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov)  
Cc: Rodgers, William  
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3800 Hamlin Road  
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United States of America  
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FAX +1-248-754-4207

**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 5/2/2012 8:46:39 PM  
**Subject:** RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)

Yes, its there now.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Giles, Michael" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 05/02/2012 04:27 PM  
**Subject:** RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

Hi Jim,

It should be there now – I submitted the request too soon after the application (VERIFY took longer to process the application so it rejected my first request).

Thanks

**From:** Jim Snyder [mailto:[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)]  
**Sent:** Wednesday, May 02, 2012 4:02 PM  
**To:** Giles, Michael  
**Subject:** RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

I don't see it in Verify.  
Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Giles, Michael" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA

Cc: "Rodgers, William" <William.Rodgers@vw.com>  
Date: 05/02/2012 03:12 PM  
Subject: RE: VW Group Certificate Request - Test Group DAD XV04.23UL Audi RS5 / RS5 Cabriolet

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Sent: Wednesday, May 02, 2012 3:03 PM  
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Cc: Rodgers, William  
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Regards,  
Mike  
Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
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United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 5/2/2012 9:22:15 PM  
**Subject:** Re: Meeting with Audi - Start-Stop Device  
[leonard.kata@vw.com](mailto:leonard.kata@vw.com)

Thanks for the note. I have the lobby room reserved so we will have plenty of room if a lot of people show up. I look forward to their review and meeting Oliver Schimdt, I don't recall meeting him before.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Kata, Leonard" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: Chris Nevers/AA/USEPA/US@EPA, David Good/AA/USEPA/US@EPA, Joel Ball/AA/USEPA/US@EPA, Linc Wehrly/AA/USEPA/US@EPA, Martin Reineman/AA/USEPA/US@EPA, Stephen Healy/AA/USEPA/US@EPA, David A Wright/AA/USEPA/US@EPA, Joel Dalton/AA/USEPA/US@EPA, William Ott/AA/USEPA/US@EPA, "Schmidt, Oliver" <Oliver.Schmidt@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 05/01/2012 05:32 PM  
Subject: Meeting with Audi - Start-Stop Device

Hi Jim:

Just to keep you informed, Audi is coming to the May 8 meeting prepared to provide a review of the system and respond to the points that you mentioned to me (i.e., enable conditions, operation during reasonable drive conditions, panic stop, stop-and-go traffic, etc).

As you know, we have some Audi confirmatory testing going on at EPA so the Audi personal already there will attend the meeting and be able to respond to any questions. Participants from our side include:

- Karlheinz Kissling (Audi AG)
- Carsten Stang (Audi AG)
- Andy Kramer (Audi AG)
- Mark Banzer (Audi AG)
- Oliver Schmidt (VWGoA – General Manager EEO)
- Leonard Kata (VWGoA)
- William Rodgers (VWGoA) (tentative)

Mr. Schmidt is my current Manager and successor to Christoph Kohnen. He would appreciate the opportunity to meet EPA staff involved in emission certification and policy at this meeting.

Let me know if you have any further questions.



Best regards,

Len

---

Leonard W. Kata  
Manager, Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian"  
**Sent:** Thur 5/3/2012 2:53:54 PM  
**Subject:** RE: Meeting to discuss the Quattros  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
[Sebastian.Berenz@vw.com](mailto:Sebastian.Berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>  
<mailto:Sohacki.Lynn@epamail.epa.gov>  
[image001.gif](#)

Hello Lynn,

It is me and my colleague Garrett Horton, only two of us.

See you at 4 pm.

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Thursday, May 03, 2012 10:50 AM  
To: Berenz, Sebastian  
Subject: RE: Meeting to discuss the Quattros

Hi, Sebastian.

For seating purposes, how many will be attending from VW/Audi?

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

"Berenz, Sebastian" ---05/03/2012 09:46:29 AM---Hello Lynn, 4:00 pm is perfect. See you at 4:00 pm.

From: "Berenz, Sebastian" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 05/03/2012 09:46 AM  
Subject: RE: Meeting to discuss the Quattros

Hello Lynn,

4:00 pm is perfect. See you at 4:00 pm.  
Just let me know where exactly I will have to go.

Thank you very much.  
Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487

FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Thursday, May 03, 2012 9:43 AM  
To: Berenz, Sebastian  
Subject: Meeting to discuss the Quattros

Hi, Sebastian.

It looks like most of the team members are available between 4 and 4:30. Do you think that will be enough time for your presentation? If not, let me know.

Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

**To:** Jim Snyder/AA/USEPA/US@EPA;"Nagel, Carsten (N/EA-521)"  
[Carsten.Nagel@audi.de]; Nagel, Carsten (N/EA-521)" [Carsten.Nagel@audi.de];  
Kissling, Karlheinz (N/EA-521)" [Karlheinz.Kissling@AUDI.DE]  
**From:** "Kata, Leonard"  
**Sent:** Mon 5/7/2012 12:42:01 PM  
**Subject:** Audi Start-Stop Meeting

When: Tuesday, May 08, 2012 1:00 PM-2:00 PM (GMT-05:00) Eastern Time (US & Canada).  
Where: EPA Conference Room

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

Hello Jim:

Last week, I reported the names of the participants for the Audi Start-Stop system meeting and demo drive. Unfortunately, Mr. Kissling will not be attending in person. If possible, we would like to connect with some of our colleagues in Germany by telephone.

Therefore, I have arranged a conference call-in number. I would appreciate it if there is a speaker telephone available in the conference room.

This invitation is merely to set up the call-in number.

Best regards,

Len

**To:** "Nagel, Carsten (N/EA-521)" [Carsten.Nagel@audi.de]; Kissling, Karlheinz (N/EA-521)" [Karlheinz.Kissling@AUDI.DE]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard"  
**Sent:** Mon 5/7/2012 1:05:44 PM  
**Subject:** Update: Audi Start Stop Demo.

When: Tuesday, May 08, 2012 1:00 PM-2:00 PM (GMT-05:00) Eastern Time (US & Canada).  
Where: EPA Conference Room C126

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

Hello Jim:

I am resending because the conference call number did not appear (operator error??). I hope that it works this time.

This is a call-in number for the Audi Start-Stop demo and discussion.

Best regards,

Len

You have been invited to attend a conference call. Please accept or reject. Details are below.

Audio Conference Information:

**Ex. 6**

**To:** "Nagel, Carsten (N/EA-521)" [Carsten.Nagel@audi.de]; Kissling, Karlheinz (N/EA-521)" [Karlheinz.Kissling@AUDI.DE]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard"  
**Sent:** Mon 5/7/2012 1:05:45 PM  
**Subject:** Audi Start Stop Demo.

When: Tuesday, May 08, 2012 1:00 PM-2:00 PM (GMT-05:00) Eastern Time (US & Canada).  
Where: EPA Conference Room C126

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

Hello Jim:

I am resending because the conference call number did not appear (operator error??). I hope that it works this time.

This is a call-in number for the Audi Start-Stop demo and discussion.

Best regards,

Len

You have been invited to attend a conference call. Please accept or reject. Details are below.

Audio Conference Information:

**Ex. 6**

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** "Giles, Michael"  
**Sent:** Mon 5/7/2012 4:48:29 PM  
**Subject:** VW Group - Cert Request for Audi Test Group DADXV02.53UK (TTRS)

Hello Jim,

FYI, we just submitted a certification request for the above test group (Audi TTRS).

Note, this is a carryover test group with no new tests or models. Please let me know if you have any questions about this.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207



**To:** "Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 5/7/2012 8:22:06 PM  
**Subject:** audi testing

The Audi 3.0L is indeed ready for testing tomorrow, with S/Stop disabled. I couldn't find out when it will test so best recommendation is to show up at 7:00.  
The evap test result was .50g. Results should show up tomorrow in Verify.

The 4.0L is here and scheduled for wednesday.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Giles, Michael" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** "Rodgers, William" <William.Rodgers@vw.com>  
**Date:** 05/07/2012 12:48 PM  
**Subject:** VW Group - Cert Request for Audi Test Group DADXV02.53UK (TTRS)

Hello Jim,

FYI, we just submitted a certification request for the above test group (Audi TTRS).

Note, this is a carryover test group with no new tests or models. Please let me know if you have any questions about this.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael"  
**Sent:** Mon 5/7/2012 8:33:03 PM  
**Subject:** RE: audi testing  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Thanks Jim

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, May 07, 2012 4:22 PM  
To: Giles, Michael  
Subject: audi testing

The Audi 3.0L is indeed ready for testing tomorrow, with S/Stop disabled. I couldn't find out when it will test so best recommendation is to show up at 7:00.  
The evap test result was .50g. Results should show up tomorrow in Verify.

The 4.0L is here and scheduled for wednesday.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William" <William.Rodgers@vw.com>  
Date: 05/07/2012 12:48 PM  
Subject: VW Group - Cert Request for Audi Test Group DAD XV02.53UK (TTRS)

Hello Jim,

FYI, we just submitted a certification request for the above test group (Audi TTRS).

Note, this is a carryover test group with no new tests or models. Please let me know if you have any questions about this.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 5/7/2012 9:20:38 PM  
**Subject:** Re: Slides for EPA/Audi Meeting; May 8, 2012 - 1:00 p.m.

Thanks. See you tomorrow.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Kata, Leonard" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, David Good/AA/USEPA/US@EPA, Chris Nevers/AA/USEPA/US@EPA, DavidA Wright/AA/USEPA/US@EPA, Joel Ball/AA/USEPA/US@EPA, Joel Dalton/AA/USEPA/US@EPA, Linc Wehrly/AA/USEPA/US@EPA, Martin Reineman/AA/USEPA/US@EPA, Stephen Healy/AA/USEPA/US@EPA, William Ott/AA/USEPA/US@EPA  
Cc: "Schmidt, Oliver" <Oliver.Schmidt@vw.com>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Rodgers, William" <William.Rodgers@vw.com>  
Date: 05/07/2012 05:02 PM  
Subject: Slides for EPA/Audi Meeting; May 8, 2012 - 1:00 p.m.

Hello all:

Prior to the May 8, 2012 demonstration of the Audi vehicle with cylinder deactivation and start-stop feature, we will provide a brief presentation.

I have attached a copy of the slides for your preview. The slides address the features of these systems and address questions previously raised by EPA such as:

- How the systems works (including control conditions)
- Parameters that enable the start-stop feature (including threshold constants)
- Assurance that the start-stop system is active under reasonable driving conditions
- A description of special driving situations that will turn off the system (e.g., stop-and-go traffic, panic stops, etc).

The presentation includes an animation which will be shown during our meeting but is not included here due the large file size.

We look forward to the meeting and demo drive.

Best regards,

Len

---

Leonard W. Kata  
Manager, Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com  
[attachment "Cylinder on Demand & Start-Stop\_EPA.PDF" deleted by Jim Snyder/AA/USEPA/US]

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 5/8/2012 7:12:58 PM  
**Subject:** Re: Audi Test Groups

Yes they are in there.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 05/08/2012 01:26 PM  
Subject: Audi Test Groups

Hello Jim,

I see that the cert is in for signature for the 4.2L RS5. Thanks for the fast turnaround on this (!)

Just to double check, can you confirm you have the following cert requests in your workflow (just to make sure our requests made it through).

- 1) DADXV05.2LR8 / evaporative family DADXR0130R8A submitted April 18
- 2) DADXV02.53UK / evaporative family DADXR0110238

Just as a heads up, there will be more coming by in the next days.

Thanks  
Mike  
Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Wed 5/9/2012 12:17:37 PM  
**Subject:** RE: VW Group - Request for AECD Approval  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[Leonard.Kata@vw.com](mailto:Leonard.Kata@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hi Jim.

I was out of the office for a couple weeks dealing with a death in the family.

I'm back now but please continue dealing with Mike or Len on current issues. Feel free to contact me if you can't reach them.

Thanks Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Friday, May 04, 2012 4:07 PM  
To: Rodgers, William  
Subject: Re: VW Group - Request for AECD Approval

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael" <michael.giles@vw.com>, "Kata, Leonard" <Leonard.Kata@vw.com>  
Date: 04/16/2012 01:59 PM  
Subject: VW Group - Request for AECD Approval

Hello Jim,

I have submitted to Verify two 2013 AECD approval requests for the following test groups. Please contact Len Kata or myself if you have any questions about these requests.

DVWXV02.0U5N – TDI (non-SCR)

DVWXV02.0U4S – TDI with SCR

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.

Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Wed 5/9/2012 12:55:51 PM  
**Subject:** RE: VW Dual Fuel Calculation

Hello Bob;

Sorry I didn't get a chance to track you down yesterday, I ran out of time. Thanks for the calculation sample. As far as I can see my numbers and calculation are the same. I understand now that the baseline calculated average is our fleet where FFV Bentley Continental models are with gasoline fuel and the AMFA calculation is the where the Continental models are included with the E85 bonus. I assume TPA means test procedure adjustment. So, the baseline calculated fleet average is with the FFV Continental models using gasoline only and the AMFA fleet average with the calculated bonus we get for the FFV models? What does the acronym AMFA mean, adjusted manufacturer fleet average? I originally submitted only the AMFA values. I have submitted another version with the baseline values into Verify. I think we are in agreement now.

I wanted to show you the Audi A8L 4.0L bi turbo demonstration vehicle yesterday. The vehicle is there today with my German colleagues. If you would like to test drive it, let me know and I can have the German guys contact you. This vehicle is equipped with cylinder deactivation and a start/stop system for improved real world, fuel economy.

Thanks,  
Richard 248 754 4213

-----Original Message-----

From: Robert Peavyhouse [mailto:Peavyhouse.Robert@epamail.epa.gov]  
Sent: Tuesday, May 08, 2012 2:37 PM  
To: Thomas, Richard (EEO)  
Subject: VW Dual Fuel Calculation

WARNING!!! (from amgwyin01.vwoa.na.vwg)

The following message attachments were flagged by the antivirus scanner:

Attachment [2.2] VW Flex Analysis.xlsx, scan failed: File encrypted. Action taken: incomplete scan

Please contact the Help Desk at x44800 with any questions.

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 5/9/2012 2:15:52 PM  
**Subject:** Audi stop start follow up

Hello Jim,

I left a voice message, but to clarify:

- The Audi cert team still has the 4.0L demo car in Ann Arbor, with a correction for the start/stop mode setting problem after key-off. Please let us know if you would like to have a look at this; It uses the same SW as the 3.0L and this software is not emissions related as it is part of a body control unit (not ECM).
- Please let us know if there are any issues with respect to the validation of the 3.0L test results because of the above issue.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** Vincent Mazaitis/AA/USEPA/US@EPA;"Giles, Michael (EEO)" [michael.giles@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 5/10/2012 6:17:02 PM  
**Subject:** VW Group - VID D3UF-DAQ Audi A8 3.0T  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

We are finished with testing the Audi A8 3.0L, VID D3UF-DAQ currently at your facility. Please release it for pick up on Friday May11th.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Vincent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 5/10/2012 6:21:21 PM  
**Subject:** Audi test results  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Vince,

When available, please scan and forward a copy of the test results conducted on Wed. May 9th for Audi test vehicle D3UJ-DAQ. Send to Mike Giles and myself.

Thanks

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Giles, Michael (EEO)" [michael.giles@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Fri 5/11/2012 11:23:25 AM  
**Subject:** Re: Audi test results  
[D3UJ-DAQ 5-9-12.pdf](#)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Bill,

Please find enclosed the Laboratory Test Data for D3UJ-DAQ Config. 00 tested on 5-9-12. The official results are in Verify.

If you have any questions or concerns, please contact me.

Thanks Bill,

Vince Mazaitis

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>, Jim Snyder/AA/USEPA/US@EPA  
Date: 05/10/2012 02:21 PM  
Subject: Audi test results

Hello Vince,

When available, please scan and forward a copy of the test results conducted on Wed. May 9th for Audi test vehicle D3UJ-DAQ. Send to Mike Giles and myself.

Thanks

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States


office (248) 754-4219


fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

Cert

NVFEL Laboratory Test Data							CVS																																																																																																																																																																																																																																								
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data																																																																																																																																																																																																																																															
Test Information				Vehicle ID: D3UU-DAQ																																																																																																																																																																																																																																											
 Test Date: 5/9/2012 Key Start / Hot Soak: 10:37:27 / 09:42 Fuel Container ID: F00023 Fuel Type: 61 Tier 2 Cert Test Fuel Test Procedure: 21 Federal fuel 2-day exhaust (w/can loa) Calculation Method: Gasoline Pretest Remarks:				MFR Name: AUDI MFR Codes: 640 Config #: 00 Transmission: S Shift Schedule: A09980005 Beginning Odometer: 004579.0 MI Drive Schedule: ftp3bag Soak Period: 20.4 hours																																																																																																																																																																																																																																											
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NVFEL Laboratory Test Data							CVS	
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
Test Number: 2012-0176-003				Vehicle ID: D3UJ-DAQ				
<b>Results</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>
		(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	
	Phase 1	0.534	15.625	0.100	1741.9	0.179	0.366	1.087
	Phase 2	0.017	0.077	0.023	1951.5	0.000	0.017	
	Phase 3	0.007	0.089	0.024	1461.1	0.006	0.002	
<b>Test Conditions</b>								
		<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>			
	Barometer (InHg)	28.86	28.86	28.86				
	Avg Cell Temp (degF)	72.36	72.32	72.14				
	Dew Point (degF)	48.97	48.76	49.11				
	Specific Humidity (grains/lbm)	53.40	52.98	53.69				
	NOx Corr Factor	0.9078	0.9062	0.9090				
	CO2 Dilution Factor	10.758	16.360	12.910				
	CFV Vmix (scf @68F)	2808.81	4803.12	2803.33				
	Total Vmix (scf@68F)	2831.05	4841.40	2825.63				
	CVS Flow Rate Avg (scfm)	332.08	331.21	331.36				
Fan Placement: One Fan - Up - Front								
	Phase Time (secs)	507.51	870.10	507.60				
	Distance (miles)	3.578	3.844	3.582				
	Bag Analysis Time (secs)	1003.8	247.1	141.9				
<b>MFR Test Results</b>								
for Procedure 21 Federal fuel 2-day exhaust (w/can load)								
<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>		
1E+07	0.0178	0.254	0.026	442	0	0.0132		
<u>Odometer</u>	<u>MPG</u>							
4456 M	20.1							
MPG is 7.79 % higher than EPA MPG				MFR Lab: Audi AG Neckarsulm				
				Dyno: 7				
				Fuel: 61 Tier 2 Cert Gasoline				
<div style="display: flex; justify-content: space-between; font-size: small;"> <span>v120405 - d329 EPAVDAEm120509101820</span> <span>Page 2 of 2</span> <span>Print Time 10-May-2012 15:07</span> </div>								



# NVFEL Laboratory Test Data

PARTICULATE

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0176-003

Vehicle ID: D3UJ-DAQ

## Test Information



Test Date: 5/9/2012

Key Start: 10:37:27 / 09:42

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Test Fuel

Test Procedure: 21 Federal fuel 2-day exhaust (w/can loa

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: AUDI

MFR Codes: 640

ADX

Config #: 00

Transmission: S

Shift Schedule: A09980005

Beginning Odometer: 004579.0 MI

Drive Schedule: ftp3bag

Soak Period: 20.4 hours

All filter weights are corrected for buoyancy.

Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / mi	Filter comment
Phase 1	A	706728	147.8716	147.9064	0.03474	13.217	3.694	
	B	706731	145.9229	145.9582	0.03534	13.463	3.763	
	C	706734	145.2991	145.3427	0.04365	16.764	4.685	

Remarks:

Phase 2	A	706729	145.8620	145.8794	0.01742	6.605	1.718	
	B	706732	146.3159	146.3361	0.02022	7.669	1.995	
	C	706735	145.5808	145.6044	0.02362	8.968	2.333	

Remarks:

Phase 3	A	706730	147.8957	147.9305	0.03474	13.195	3.684	
	B	706733	147.8753	147.8940	0.01872	7.109	1.985	
	C	706736	144.1243	144.1443	0.02002	7.629	2.130	

Remarks:

## Phase 4

Remarks: This test has particulate results.

## Average Results

	Net Wt mg	Total Mass mg	Total Mass mg / mi
Phase 1	0.03791	14.481	4.047
Phase 2	0.02042	7.747	2.016
Phase 3	0.02449	9.311	2.600

All filter weights are corrected for buoyancy.

Weighted All Filters:

2.59741

## Reference Filter Stability Check

2% of Avg Net or 0.01 mg	No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Stability Check	Dyno #: D329 - AWD
0.01	1	144.64335	144.64416	0.00081	PASS/FAIL	Inertia: 5000
	2	143.27654	143.27565	-0.00089	PASS	EPA Set Co A: -6.32
					PASS	EPA Set Co B: 0.2344
						EPA Set Co C: 0.01488

Emissions Bench Mexa 7200dle

v120405 - d329 EPAVDAEm120509101820

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Print Time 10-May-2012 15:07

**NVFEL Laboratory Test Data****PARTICULATE****Final Laboratory Test Results- Refer to VERIFY Reports for Official Data**

Test Number: 2012-0176-003


Vehicle ID: D3UJ-DAQ

Vehicle ID: 0000-BAQ							
<u>WEIGHING CHAMBER</u>		<u>Buoyancy</u>	<u>Operator</u>	<u>Chamber Temp</u>	<u>Dew Point</u>	<u>Barometer</u>	<u>Last Change in Status</u>
	Timestamp	Factor	(Id)	(°F)	(°F)	(°Hg)	Status @ timestamp
<u>Pre-test</u>	5/8/12 13:06	1.0011050	022298	71.7	49.2	28.85	NORM @ 05/07/12 14:51:29
<u>Post-test</u>	5/9/12 12:58	1.0011050	022298	71.6	49.1	28.84	NORM @ 05/07/12 14:51:29

**Test Conditions**

	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 4</b>
Barometer (inHg)	28.86	28.86	28.86	
Avg Cell Temp (degF)	72.36	72.32	72.14	
Dew Point (degF)	48.97	48.76	49.11	
Specific Humidity (grains/lbm)	53.40	52.98	53.69	
NOx Corr Factor	0.9078	0.9062	0.9090	
Dilution Factor	10.76	16.36	12.91	
CFV Vmix (scf @68F)	2808.81	4803.12	2803.33	
Sample Volume A (scf @68F)	7.440	12.767	7.438	
Sample Volume B (scf @68F)	7.431	12.764	7.440	
Sample Volume C (scf @68F)	7.371	12.754	7.415	
Sample Volume D (scf @68F)				
Sample Volume Average (scf @68F)	7.414	12.762	7.431	
Total Vmix (scf @68F)	2831.05	4841.40	2825.63	
Phase Time (sec)	507.51	870.10	507.60	
Distance (miles)	3.578	3.844	3.582	
PSU Probe A (degC)				
PSU Probe B (degC)				
PSU Probe C (degC)				
PSU Dil Air A (degC)	44.5	42.5	41.5	
PSU Dil Air B (degC)	44.8	44.5	43.6	
PSU Dil Air C (degC)	43.8	42.9	41.8	
PSU Filter A (degC)	45.8	46.2	46.3	
PSU Filter B (degC)	47.7	47.3	48.0	
PSU Filter C (degC)	45.6	45.4	45.2	
PSU Dil Flow A (lpm)	29.9	29.9	29.9	
PSU Dil Flow B (lpm)	29.9	29.9	29.9	
PSU Dil Flow C (lpm)	30.0	29.9	29.9	
PSU A Proportionality				
PSU B Proportionality				
PSU C Proportionality				

Cert

NVFEL Laboratory Test Data							CVS	
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
Test Information		Test Date: 5/9/2012 Key Start: 12:34:14 Fuel Container ID: F00023 Fuel Type: 61 Tier 2 Cert Test Fuel Test Procedure: 03 HWFET (hwfetprep_hwfet) Calculation Method: Gasoline Pretest Remarks:			Vehicle ID: D3UJ-DAQ MFR Name: AUDI MFR Codes: 640 Config #: 00 Transmission: S Shift Schedule: A09980011 Beginning Odometer: 004610.0 MI Drive Schedule: hwfet_hwfet			
								
<b>Bag Data</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample		3.369	4.485	0.115	0.893	2.334		
Ambient		2.245	0.079	0.000	0.050	1.963		
Net Concentration		1.274	4.412	0.115	0.846	0.502	0.728	
		Remarks:						
<b>Phase 2</b>								
Sample								
Ambient								
Net Concentration								
		Remarks:						
<b>Phase 3</b>								
Sample								
Ambient								
Net Concentration								
		Remarks:						
<b>Phase 4</b>								
Sample								
Ambient								
Net Concentration								
		Remarks:						
<b>Results</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>	<u>Vol MPG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1		0.012	0.087	0.003	262.3	0.006	0.007 / 0.007	34.004
		(NMOG=1.04xNMHC)						
<b>Fuel Economy</b>		<u>Gasoline MPG</u>			<u>Dyno Settings</u>			
Phase 1		33.93			Dyno #: D329 - AWD			
					Inertia: 5000			
					EPA Set Co A: -6.32			
					EPA Set Co B: 0.2344			
					EPA Set Co C: 0.01488			
					Emiss-Bench: Mexa 7200dle			
v120405 - d329		EPAVDAEm120509120755		Page 1 of 2		Print Time 10-May-2012 15:00		

# NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data  
Test Number: 2012-0176-002

Vehicle ID: D3UJ-DAQ

## Results



	<u>HC-FID</u> (grams)	<u>CO</u> (grams)	<u>NOx</u> (grams)	<u>CO2</u> (grams)	<u>CH4</u> (grams)	<u>NMHC</u> (grams)	<u>Meth Response</u>
Phase 1	0.128	0.892	0.035	2687.9	0.058	0.073	1.087

## Test Conditions

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (InHg)	28.86			
Avg Cell Temp (degF)	72.20			
Dew Point (degF)	48.93			
Specific Humidity (grains/lbm)	53.33			
NOx Corr Factor	0.9076			
CO2 Dilution Factor	14.987			
CFV Vmix (scf @68F)	6130.24			
CVS Flow Rate Avg (scfm)	480.74			

Fan Placement: One Fan - Up - Front  
Phase Time (secs) 765.10  
Distance (miles) 10.247  
Bag Analysis Time (secs) 126.0

## MFR Test Results

for Procedure 3 HWFE

<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>
1E+07	0.0017	0.013	0.004	256	0	0.0009

Odometer  
4467 M


MPG  
34.7

MPG is 2.28 % higher than EPA MPG

MFR Lab: Audi AG Neckarsulm

Dyno: 7  
Fuel: 61 Tier 2 Cert Gasoline

Cert

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Information			Vehicle ID: D3UJ-DAQ				
	Test Date: 5/9/2012		MFR Name: AUDI				
	Key Start: 13:45:06		MFR Codes: 640      ADX				
	Fuel Container ID: F00023		Config #: 00				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: S				
	Test Procedure: 90 US06 (us06warmup_us06)		Shift Schedule: A09980041				
	Calculation Method: Gasoline		Beginning Odometer: 004630.0 MI				
Pretest Remarks:			Drive Schedule: us06_us06				
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	3.700	6.568	0.403	1.208	2.287		
Ambient	2.528	0.082	0.008	0.043	1.949		
Net Concentration	1.400	6.493	0.396	1.169	0.513	0.842	
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks: This test has particulate results.							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.016	0.151	0.014	427.9	0.007	0.010 / 0.010	20.846
(NMOG=1.04xNMHC)							
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>			<u>Dyno Settings</u>		<u>Dyno #:</u> D329 - AWD	
Phase 1	20.80					Inertia: 5000	
						EPA Set Co A: -6.32	
						EPA Set Co B: 0.2344	
						EPA Set Co C: 0.01488	
				Emiss-Bench: Mexa 7200dle			
v120405 - d329 EPAVDAEm120509131817							Page 1 of 2
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# NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data  
Test Number: 2012-0176-001

Vehicle ID: D3UJ-DAQ

## Results



	<u>HC-FID</u> (grams)	<u>CO</u> (grams)	<u>NOx</u> (grams)	<u>CO2</u> (grams)	<u>CH4</u> (grams)	<u>NMHC</u> (grams)	<u>Meth Response</u>
Phase 1	0.129	1.209	0.110	3422.8	0.055	0.078	1.087

## Test Conditions

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	28.84			
Avg Cell Temp (degF)	72.27			
Dew Point (degF)	48.86			
Specific Humidity (grains/lbm)	53.22			
NOx Corr Factor	0.9071			
CO2 Dilution Factor	11.082			
CFV Vmix (scf @68F)	5623.12			
Total Vmix (scf@68F)	5649.30			
CVS Flow Rate Avg (scfm)	560.16			

Fan Placement: USO6 Only - One Large Fan - Up - Front

Phase Time (secs)	602.30
Distance (miles)	8.000
Bag Analysis Time (secs)	136.1

## MFR Test Results

for Procedure 90 US06

<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>
1E+07	0.011	0.077	0.015	373	0	0.0063

Odometer  
4489 M

MPG  
23.8

MPG is 14.43 % higher than EPA MPG

MFR Lab: Audi AG Neckarsulm

Dyno: 7  
Fuel: 61 Tier 2 Cert Gasoline

# NVFEL Laboratory Test Data

PARTICULATE

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0176-001

Vehicle ID: D3UJ-DAQ

## Test Information



Test Date: 5/9/2012

Key Start: 13:45:06

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Test Fuel

Test Procedure: 90 US06 (us06warmup\_us06)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: AUDI

MFR Codes: 640

Config #: 00

Transmission: S

Shift Schedule: A09980041

Beginning Odometer: 004630.0 MI

Drive Schedule: us06\_us06

ADX

All filter weights are corrected for buoyancy.

Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / ml	Filter comment
Phase 1	A	416748	143.7033	143.7681	0.06469	41.796	5.224	
	B	416749	146.0568	146.0997	0.04277	27.607	3.451	
	C	416750	143.2798	143.3407	0.06089	39.620	4.953	

Remarks:

## Phase 2

Remarks:

## Phase 3

Remarks:

## Phase 4

Remarks: This test has particulate results.

## Average Results

	Net Wt mg	Total Mass mg	Total Mass mg / ml
Phase 1	0.05612	36.341	4.543

All filter weights are corrected for buoyancy.

## Reference Filter Stability Check

2% of Avg Net or 0.01 mg	No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Stability Check PASS/FAIL	Dyno #: D329 - AWD Inertia: 5000
0.01	1	144.64406	144.64707	0.00301	PASS	EPA Set Co A: -6.32
	2	143.27515	143.27655	0.00141	PASS	EPA Set Co B: 0.2344
						EPA Set Co C: 0.01488

Emissions Bench Mexa 7200dle

v120405 - d329 EPAVDAEm120509131817

Page 1 of 2

Print Time 10-May-2012 14:59

**NVFEL Laboratory Test Data****PARTICULATE****Final Laboratory Test Results- Refer to VERIFY Reports for Official Data**

Test Number: 2012-0176-001

Vehicle ID: D3UJ-DAQ


<u>WEIGHING CHAMBER</u>	<u>Buoyancy</u>	<u>Operator</u>	<u>Chamber Temp</u>	<u>Dew Point</u>	<u>Barometer</u>	<u>Last Change in Status</u>
Timestamp	Factor	(id)	(°F)	(°F)	("Hg)	Status @ timestamp
<b>Pre-test</b> 5/9/12 9:35	1.0011050	022298	71.7	49.2	28.85	NORM @ 05/07/12 14:51:29
<b>Post-test</b> 5/10/12 9:50	1.0011092	022298	72	49.7	28.98	NORM @ 05/10/12 08:53:46

**Test Conditions**

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	28.84			
Avg Cell Temp (degF)	72.27			
Dew Point (degF)	48.86			
Specific Humidity (grains/lbm)	53.22			
NOx Corr Factor	0.9071			
Dilution Factor	11.08			
CFV Vmix (scf @68F)	5623.12			
Sample Volume A (scf @68F)	8.744			
Sample Volume B (scf @68F)	8.753			
Sample Volume C (scf @68F)	8.681			
Sample Volume D (scf @68F)				
Sample Volume Average (scf @68F)	8.726			
Total Vmix (scf @68F)	5649.30			
Phase Time (sec)	602.30			
Distance (miles)	8.000			
PSU Probe A (degC)				
PSU Probe B (degC)				
PSU Probe C (degC)				
PSU Dil Air A (degC)	41.7			
PSU Dil Air B (degC)	43.6			
PSU Dil Air C (degC)	41.9			
PSU Filter A (degC)	45.6			
PSU Filter B (degC)	47.0			
PSU Filter C (degC)	44.7			
PSU Dil Flow A (lpm)	29.6			
PSU Dil Flow B (lpm)	29.6			
PSU Dil Flow C (lpm)	29.6			
PSU A Proportionality				
PSU B Proportionality				
PSU C Proportionality				



Cent

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0176-004			Vehicle ID: D3UJ-DAQ				
	<b>Test Information</b>		Test Date: 5/9/2012	MFR Name: AUDI			
			Key Start: 14:23:43	MFR Codes: 640		ADX	
			Fuel Container ID: F00023	Config #: 00			
			Fuel Type: 61 Tier 2 Cert Test Fuel	Transmission: S			
			Test Procedure: 89 us062bag (us06warmup_2bagus06)	Shift Schedule: A09980041			
			Calculation Method: Gasoline	Beginning Odometer: 004646.0 MI			
			Pretest Remarks:		Drive Schedule: us06warmup_2bagus06		
<hr/>							
<b>Bag Data</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
<b>Phase 1</b>		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample		2.803	4.157	0.370	1.114	2.191	
Ambient		1.871	0.070	0.006	0.043	1.937	
Net Concentration		1.089	4.092	0.365	1.075	0.415	0.638
Remarks:							
<b>Phase 2</b>							
Sample		2.462	4.306	0.238	1.224	2.085	
Ambient		1.848	0.063	0.006	0.043	1.941	
Net Concentration		0.783	4.249	0.232	1.185	0.322	0.434
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<hr/>							
<b>Results</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
Phase 1		0.022	0.170	0.023	700.7	0.010	0.013 / 0.014
Phase 2		0.007	0.076	0.006	334.7	0.003	0.004 / 0.004
							(NMOG=1.04xNMHC)
Composite		0.01036	0.09693	0.00984	415.272	0.00476	0.0059 / 0.0061
<hr/>							
<b>Fuel Economy</b>		<u>Gasoline MPG</u>	<u>Dyno Settings</u>				
Phase 1		12.70	Dyno #: D329 - AWD				
Phase 2		26.60	Inertia: 5000				
			EPA Set Co A: -6.32				
			EPA Set Co B: 0.2344				
			EPA Set Co C: 0.01488				
Composite		21.45	Emiss-Bench: Mexa 7200dle				

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0176-004

Vehicle ID: D3UJ-DAQ

### Results



	<u>HC-FID</u> (grams)	<u>CO</u> (grams)	<u>NOx</u> (grams)	<u>CO2</u> (grams)	<u>CH4</u> (grams)	<u>NMHC</u> (grams)	<u>Meth Response</u>
Phase 1	0.039	0.299	0.040	1233.0	0.017	0.023	1.087
Phase 2	0.043	0.476	0.039	2085.6	0.021	0.024	

### Test Conditions

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	28.84	28.84		
Avg Cell Temp (degF)	72.11	72.01		
Dew Point (degF)	49.17	48.99		
Specific Humidity (grains/lbm)	53.87	53.50		
NOx Corr Factor	0.9097	0.9082		
CO2 Dilution Factor	12.018	10.946		
CFV Vmix (scf @68F)	2213.55	3397.92		
CVS Flow Rate Avg (scfm)	560.39	558.56		

Fan Placement: USO6 Only - One Large Fan - Up - Front

Phase Time (secs)	129.91	365.00	107.10
Distance (miles)	1.760	6.232	
Bag Analysis Time (secs)	131.0	353.0	

### MFR Test Results

for Procedure 90 US06

<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>
1E+07	0.011	0.077	0.015	373	0	0.0063

Odometer  
4489 M

MPG  
23.8

MPG is 10.97 % higher than EPA MPG

MFR Lab: Audi AG Neckarsulm

Dyno: 7

Fuel: 61 Tier 2 Cert Gasoline

**To:** Vincent Mazaitis/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 5/11/2012 11:45:04 AM  
**Subject:** RE: Audi test results  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Thanks Vince.

Could you let us know if the 3 Liter car is released? If so we will pick it up.

From: Vincent Mazaitis [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Friday, May 11, 2012 7:23 AM  
To: Rodgers, William (EEO)  
Cc: Jim Snyder; Giles, Michael (EEO)  
Subject: Re: Audi test results

Hello Bill,

Please find enclosed the Laboratory Test Data for D3UJ-DAQ Config. 00 tested on 5-9-12. The official results are in Verify.

If you have any questions or concerns, please contact me.

Thanks Bill,

Vince Mazaitis

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>, Jim Snyder/AA/USEPA/US@EPA  
Date: 05/10/2012 02:21 PM  
Subject: Audi test results

Hello Vince,

When available, please scan and forward a copy of the test results conducted on Wed. May 9th for Audi test vehicle D3UJ-DAQ. Send to Mike Giles and myself.

Thanks

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA,"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Fri 5/11/2012 12:09:39 PM  
**Subject:** RE: Audi test results  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Mike,

D3UF-DAQ has been released. You may pick the vehicle up at any time through Security as usual. They have the release slip and keys.

Thanks,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA, "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 05/11/2012 07:46 AM  
Subject: RE: Audi test results

Thanks Vince.

Could you let us know if the 3 Liter car is released? If so we will pick it up.

From: Vincent Mazaitis [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Friday, May 11, 2012 7:23 AM  
To: Rodgers, William (EEO)  
Cc: Jim Snyder; Giles, Michael (EEO)  
Subject: Re: Audi test results

Hello Bill,

Please find enclosed the Laboratory Test Data for D3UJ-DAQ Config. 00 tested on 5-9-12. The official results are in Verify.

If you have any questions or concerns, please contact me.

Thanks Bill,

Vince Mazaitis

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>, Jim Snyder/AA/USEPA/US@EPA  
Date: 05/10/2012 02:21 PM  
Subject: Audi test results

Hello Vince,

When available, please scan and forward a copy of the test results conducted on Wed. May 9th for Audi test vehicle D3UJ-DAQ. Send to Mike Giles and myself.

Thanks

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

william.rodgers@vw.com

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Fri 5/11/2012 1:36:00 PM  
**Subject:** RE: Audi test results  
[Verify\\_D3UJ-DAQ\\_5-9-12.pdf](#)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Mike,

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Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 05/11/2012 08:31 AM  
Subject: RE: Audi test results

Vince,

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Mike

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Sent: Friday, May 11, 2012 7:23 AM  
To: Rodgers, William (EEO)  
Cc: Jim Snyder; Giles, Michael (EEO)  
Subject: Re: Audi test results



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**To:** Lynn Sohacki/AA/USEPA/US@EPA; Bernd Liebner/AA/USEPA/US@EPA[]; ernd Liebner/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian (EEO)"  
**Sent:** Fri 5/11/2012 2:06:05 PM  
**Subject:** EPA surveillance program MY2010 2.5l AVWXV02.5259  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

Hello Bernd,

John White contacted me that we will have the first car for EPA surveillance program MY2010 2.5l AVWXV02.5259.

VIN: Ex. 6

Can you please verify this, so that I can prepare the data for this vehicle?

Thank you very much.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

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**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 5/14/2012 12:10:02 PM  
**Subject:** FW: Release of Audi Test Vehicle D3UJ-DAQ  
[\[mailto:Mazaitis.Vincent@epamail.epa.gov\]](mailto:Mazaitis.Vincent@epamail.epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Mazaitis.Vincent@epamail.epa.gov>  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hi Jim,

I think I should have sent the email below to you about releasing the Audi A8 – sorry about that. Please let us know status when you can.

Thanks,

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From: Giles, Michael (EEO)  
Sent: Friday, May 11, 2012 2:17 PM  
To: 'Vincent Mazaitis'  
Cc: Thomas, Richard (EEO) (Richard.Thomas@vw.com); Berenz, Sebastian (EEO)  
Subject: Release of Audi Test Vehicle D3UJ-DAQ

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Please advise.

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Mike

From: Vincent Mazaitis [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Friday, May 11, 2012 9:36 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: RE: Audi test results

Hello Mike,

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Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 05/11/2012 08:31 AM  
Subject: RE: Audi test results

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**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Berenz, Sebastian (EEO)" [Sebastian.Berenz@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Mon 5/14/2012 1:16:29 PM  
**Subject:** Re: Release of Audi Test Vehicle D3UJ-DAQ  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Mazaitis.Vincent@epamail.epa.gov>  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Mike,

I'll release it this morning.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
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[\[mailto:Mazaitis.Vincent@epamail.epa.gov\]](mailto:Mazaitis.Vincent@epamail.epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
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[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Vince and I talked and I agreed that we can release the car.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

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# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number:

Equivalent Test Weight:  Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:  Gallons 40% Fill  Gallons

Drive Axle:  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

A  Lb-force

B  Lb-force\*mpH

C  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

#### Canister Loading Process:

#### Fuel Draining Process:

#### ABS Disabling Process:

#### Fuel Switch Process (Flex Fuel only):

#### Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative:

\_\_\_\_\_

Date:

\_\_\_\_\_

EG&G Representative:

\_\_\_\_\_

Date:

\_\_\_\_\_

EPA Representative:

\_\_\_\_\_

Date:

\_\_\_\_\_

**VOLKSWAGEN****RECEIVED**  
**MAR 05 2002**  
**VPCD**

February 28, 2002

Engineering and  
Environmental Office (EEO)  
Mail Code EEO  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Tel. (248) 754-5000  
Fax (248) 754-4707

Mr. Bruce Sdunek  
U.S. Environmental Protection Agency  
Office of Mobile Sources  
Vehicle Programs and Compliance Division  
National Vehicle and Fuel Emission Laboratory  
2000 Traverwood  
Ann Arbor, Michigan 48105

Subject: Request for Additional Preconditioning

Dear Mr. Sdunek:

As part of the 2003 model year product line, Volkswagen intends to offer a version of the 2.0-liter Volkswagen Jetta certified to the California Partial Zero Emission Vehicle (PZEV) requirements. Therefore, this concept will be required to comply with the California Super-Ultra-Low Emission Vehicle (SULEV) exhaust emission standards and zero-evaporative emission standards.

To ensure emission stabilization prior to emission testing, Volkswagen requests, in accordance with the provisions of 40 CFR 86.132-96(d), that additional preconditioning be allowed when testing the 2.0-liter Volkswagen Jetta PZEV concept. The entire preconditioning process would consist of the prescribed Urban Dynamometer Driving Schedule (UDDS) with the addition of one complete Highway Fuel Economy Test (HWFET) cycle.

The additional preconditioning would be performed whenever an emission test is conducted for new vehicle certification or in-use emission testing.

Your consideration of this matter is greatly appreciated. If there are any questions, please contact me at (248) 754-4704, or Mr. Dennis Reineke of my staff at (248) 754-4715.

Best regards,  
VOLKSWAGEN OF AMERICA, INC.

Leonard W. Kata, Team Leader  
Emission Regulations and Certification  
Engineering and Environmental Office

Dennis/Len,

Add'l preconditioning has  
never been allowed ~~from~~ during  
EPA preloaded canister tests.  
Therefore we must deny your request  
for certification tests.

For in-use tests it is  
approved, ref CD-94-13 dated 7/29/94.

D Good 4/4/02

**To:** "Beierschmitt, Thomas (T.A.)" [tbeiers1@ford.com]; 'Bill Pagels' [bill.pagels@meidenamerica.com]; 'Bob Maxwell' [remaxwell@comcast.net]; hris Nevers/AA/USEPA/US@EPA; "Dave Kosmalski" [david.kosmalski@gm.com]; 'Dave Kosmalski' [david.kosmalski@gm.com]; 'Dennis Pawlak' [Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid' [Douglas.Reid@na.mitsubishi-motors.com]; 'Duoba, Mike' [mduoba@anl.gov]; 'Jeff Foor' [jdf14@chrysler.com]; 'Jim Smith' [james.smith@chrysler.com]; im Snyder/AA/USEPA/US@EPA; "Keith Thompson" [Keith.Thompson@bepco.com]; 'Keith Thompson' [Keith.Thompson@bepco.com]; 'Kent Theil' [okt@chrysler.com]; 'kyle.bedsole@gm.com' [kyle.bedsole@gm.com]; 'Mahmoud Yassine' [mky@chrysler.com]; 'Marc Belzile' [marc.a.belzile@tc.gc.ca]; 'mark paxton' [mpaxton@ganassi.com]; 'MBrussow@sae.org' [MBrussow@sae.org]; 'Meyer, Norm' [norm.meyer@tc.gc.ca]; Okawa, Naoyasu (N.) [okawa.n@mazda.co.jp]; 'Paulina.Carl@epamail.epa.gov' [Paulina.Carl@epamail.epa.gov]; Peabody, Jason (J.A.) [jpeabod6@ford.com]; ete Janosi [petejanosi@yahoo.com]; Suanne.Thomas@vw.com [Suanne.Thomas@vw.com]; 'takashi\_a\_fujiwara@ahm.honda.com' [takashi\_a\_fujiwara@ahm.honda.com]; iffany Jackson [JacksT2@nrd.nissan-usa.com]; homas Schrodtt/AA/USEPA/US@EPA; "tom.beierschmitt@tema.toyota.com" ['tom.beierschmitt@tema.toyota.com']; 'tom.beierschmitt@tema.toyota.com' ['tom.beierschmitt@tema.toyota.com']; 'tommy\_chang@ahm.honda.com' ['tommy\_chang@ahm.honda.com']; 'William Meschievitz' [william.meschievitz@tema.toyota.com]; 'Khan, Farrukh' [KhanF@NRD.NISSAN-USA.COM]

**Cc:** Carl Paulina/AA/USEPA/US@EPA]

**From:** "Glodich, Jeffrey (J.M.)"

**Sent:** Mon 5/14/2012 4:40:56 PM

**Subject:** RE: J2951 Phase II Review

<https://www.connectmeeting.att.com>

Hi all,

We are scheduled to have a J2951 meeting this Thursday. Since we are trying to wrap-up J1634 this month, it might make sense to cancel this meeting and focus on the J1634 ballot prep. Please let me know if you have any issues that need to be discussed this month, otherwise we'll cancel and reconvene in June.

Thanks,  
Jeff

-----Original Appointment-----

From: Glodich, Jeffrey (J.M.)  
Sent: Friday, January 20, 2012 1:11 PM  
To: Glodich, Jeffrey (J.M.); Beierschmitt, Thomas (T.A.); 'Bill Pagels'; 'Bob Maxwell'; 'chris nevers'; 'Dave Kosmalski'; 'Dennis Pawlak'; 'Douglas Reid'; 'Duoba, Mike'; 'Jeff Foor'; 'Jim Smith'; 'Jim Snyder'; 'Keith Thompson'; 'Kent Theil'; 'kyle.bedsole@gm.com'; 'Mahmoud Yassine'; 'Marc Belzile'; 'mark paxton'; 'MBrussow@sae.org'; 'Meyer, Norm'; Okawa, Naoyasu (N.); 'Paulina.Carl@epamail.epa.gov'; Peabody, Jason (J.A.); Pete Janosi; Suanne.Thomas@vw.com; 'takashi\_a\_fujiwara@ahm.honda.com'; Tiffany Jackson; 'Tom Schrodtt'; 'tom.beierschmitt@tema.toyota.com'; 'tommy\_chang@ahm.honda.com'; 'William Meschievitz'; Khan, Farrukh  
Cc: Carl Paulina  
Subject: J2951 Phase II Review  
When: Thursday, May 17, 2012 1:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).  
Where: Toyota, Ann Arbor

Purpose:

- Discuss implementation and macro issues
- Revisit deferred issues that were not addressed in the initial publication

Meeting Info:

**Ex. 6**

Web Address <https://www.connectmeeting.att.com>

**Ex. 6**

**To:** "Glodich, Jeffrey (J.M.)" [jglodich@ford.com]  
**Cc:** "MBrussow@sae.org" [MBrussow@sae.org]; 'Paulina.Carl@epamail.epa.gov'  
[Paulina.Carl@epamail.epa.gov]; 'tommy\_chang@ahm.honda.com'  
[tommy\_chang@ahm.honda.com]; 'tom.beierschmitt@tema.toyota.com'  
[tom.beierschmitt@tema.toyota.com]; 'Bill Pagels' [bill.pagels@meidenamerica.com]; 'Dave Kosmalski' [david.kosmalski@gm.com]; 'Douglas Reid' [Douglas.Reid@na.mitsubishi-motors.com]; iffany Jackson [JacksT2@nrd.nissan-usa.com]; 'Jim Smith'  
[james.smith@chrysler.com]; 'Jeff Foor' [jdf14@chrysler.com]; Peabody, Jason (J.A.)  
[jpeabod6@ford.com]; 'Keith Thompson' [Keith.Thompson@bepco.com]; 'Khan, Farrukh'  
[KhanF@NRD.NISSAN-USA.COM]; 'kyle.bedsole@gm.com' [kyle.bedsole@gm.com]; 'Marc Belzile' [marc.a.belzile@tc.gc.ca]; 'Duoba, Mike' [mduoba@anl.gov]; 'Mahmoud Yassine'  
[mky@chrysler.com]; 'mark paxton' [mpaxton@ganassi.com]; hris  
Nevers/AA/USEPA/US@EPA; "Meyer, Norm" [norm.meyer@tc.gc.ca]; 'Meyer, Norm'  
[norm.meyer@tc.gc.ca]; Okawa, Naoyasu (N.) [okawa.n@mazda.co.jp]; 'Kent Theil'  
[okt@chrysler.com]; arl Paulina/AA/USEPA/US@EPA; Pete Janosi [petejanosi@yahoo.com]; ete  
Janosi [petejanosi@yahoo.com]; 'Bob Maxwell' [remaxwell@comcast.net]; homas  
Schrodt/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA; "Suanne.Thomas@vw.com"  
[Suanne.Thomas@vw.com]; im Snyder/AA/USEPA/US@EPA; "Suanne.Thomas@vw.com"  
[Suanne.Thomas@vw.com]; Suanne.Thomas@vw.com [Suanne.Thomas@vw.com];  
'takashi\_a\_fujiwara@ahm.honda.com' [takashi\_a\_fujiwara@ahm.honda.com]; Beierschmitt,  
Thomas (T.A.) [tbeiers1@ford.com]; 'William Meschievitz'  
[william.meschievitz@tema.toyota.com]  
**From:** "Dennis Pawlak"  
**Sent:** Mon 5/14/2012 5:21:03 PM  
**Subject:** RE: J2951 Phase II Review  
<https://www.connectmeeting.att.com>

I'm fine with June.

Best Regards,

Dennis M. Pawlak  
Manager, Vehicle Verification  
Mitsubishi Motors R&D of America, Inc.  
dennis.pawlak@na.mitsubishi-motors.com  
Office: 734-477-6146 fax: 734-971-0901

\*\*\*\*\* CONFIDENTIALITY STATEMENT \*\*\*\*\*

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\*\*\*\*\*  
\*

From: "Glodich, Jeffrey (J.M.)" <jglodich@ford.com>  
To: "Beierschmitt, Thomas (T.A.)" <tbeiers1@ford.com>, "Bill Pagels" <bill.pagels@meidenamerica.com>, "Bob Maxwell" <remaxwell@comcast.net>, "chris nevers" <nevers.chris@epa.gov>, "Dave Kosmalski" <david.kosmalski@gm.com>, "Dennis Pawlak"

<Dennis.Pawlak@na.mitsubishi-motors.com>, ""Douglas Reid"" <Douglas.Reid@na.mitsubishi-motors.com>, ""Duoba, Mike"" <mduoba@anl.gov>, ""Jeff Foor"" <jdf14@chrysler.com>, ""Jim Smith"" <james.smith@chrysler.com>, ""Jim Snyder"" <snyder.jim@epa.gov>, ""Keith Thompson"" <Keith.Thompson@bepco.com>, ""Kent Theil"" <okt@chrysler.com>, ""kyle.bedsole@gm.com"" <kyle.bedsole@gm.com>, ""Mahmoud Yassine"" <mky@chrysler.com>, ""Marc Belzile"" <marc.a.belzile@tc.gc.ca>, ""mark paxton"" <mpaxton@ganassi.com>, ""MBrussow@sae.org"" <'MBrussow@sae.org'>, ""Meyer, Norm"" <norm.meyer@tc.gc.ca>, ""Okawa, Naoyasu (N.)"" <okawa.n@mazda.co.jp>, ""Paulina.Carl@epamail.epa.gov"" <'Paulina.Carl@epamail.epa.gov'>, ""Peabody, Jason (J.A.)"" <jpeabod6@ford.com>, Pete Janosi <petejanosi@yahoo.com>, ""Suanne.Thomas@vw.com"" <Suanne.Thomas@vw.com>, ""takashi\_a\_fujiwara@ahm.honda.com"" <takashi\_a\_fujiwara@ahm.honda.com>, Tiffany Jackson <JacksT2@nrd.nissan-usa.com>, ""Tom SchrodT"" <SchrodT.Thomas@epamail.epa.gov>, ""tom.beierschmitt@tema.toyota.com"" <'tom.beierschmitt@tema.toyota.com'>, ""tommy\_chang@ahm.honda.com"" <'tommy\_chang@ahm.honda.com'>, ""William Meschievitz"" <william.meschievitz@tema.toyota.com>, ""Khan, Farrukh"" <KhanF@NRD.NISSAN-USA.COM>  
Cc: ""Carl Paulina"" <Paulina.Carl@epamail.epa.gov>  
Date: 05/14/2012 12:40 PM  
Subject: RE: J2951 Phase II Review

Hi all,

We are scheduled to have a J2951 meeting this Thursday. Since we are trying to wrap-up J1634 this month, it might make sense to cancel this meeting and focus on the J1634 ballot prep. Please let me know if you have any issues that need to be discussed this month, otherwise we'll cancel and reconvene in June.

Thanks,  
Jeff

-----Original Appointment-----

From: Glodich, Jeffrey (J.M.)  
Sent: Friday, January 20, 2012 1:11 PM  
To: Glodich, Jeffrey (J.M.); Beierschmitt, Thomas (T.A.); 'Bill Pagels'; 'Bob Maxwell'; 'chris nevers'; 'Dave Kosmalski'; 'Dennis Pawlak'; 'Douglas Reid'; 'Duoba, Mike'; 'Jeff Foor'; 'Jim Smith'; 'Jim Snyder'; 'Keith Thompson'; 'Kent Theil'; 'kyle.bedsole@gm.com'; 'Mahmoud Yassine'; 'Marc Belzile'; 'mark paxton'; 'MBrussow@sae.org'; 'Meyer, Norm'; 'Okawa, Naoyasu (N.)'; 'Paulina.Carl@epamail.epa.gov'; 'Peabody, Jason (J.A.)'; 'Pete Janosi'; 'Suanne.Thomas@vw.com'; 'takashi\_a\_fujiwara@ahm.honda.com'; 'Tiffany Jackson'; 'Tom SchrodT'; 'tom.beierschmitt@tema.toyota.com'; 'tommy\_chang@ahm.honda.com'; 'William Meschievitz'; 'Khan, Farrukh'  
Cc: Carl Paulina  
Subject: J2951 Phase II Review  
When: Thursday, May 17, 2012 1:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).  
Where: Toyota, Ann Arbor

Purpose:

- Discuss implementation and macro issues
- Revisit deferred issues that were not addressed in the initial publication

Meeting Info:

**Ex. 6**

**Ex. 6**

Web Address <https://www.connectmeeting.att.com>

**Ex. 6**

**To:** "Beierschmitt, Thomas (T.A.)" [tbeiers1@ford.com]; 'Bill Pagels' [bill.pagels@meidenamerica.com]; 'Bob Maxwell' [remaxwell@comcast.net]; hris Nevers/AA/USEPA/US@EPA; "Dave Kosmalski" [david.kosmalski@gm.com]; 'Dave Kosmalski' [david.kosmalski@gm.com]; 'Dennis Pawlak' [Dennis.Pawlak@na.mitsubishi-motors.com]; 'Douglas Reid' [Douglas.Reid@na.mitsubishi-motors.com]; 'Duoba, Mike' [mduoba@anl.gov]; 'Jeff Foor' [jdf14@chrysler.com]; 'Jim Smith' [james.smith@chrysler.com]; im Snyder/AA/USEPA/US@EPA; "Keith Thompson" [Keith.Thompson@bepco.com]; 'Keith Thompson' [Keith.Thompson@bepco.com]; 'Kent Theil' [okt@chrysler.com]; 'kyle.bedsole@gm.com' [kyle.bedsole@gm.com]; 'Mahmoud Yassine' [mky@chrysler.com]; 'Marc Belzile' [marc.a.belzile@tc.gc.ca]; 'mark paxton' [mpaxton@ganassi.com]; 'MBrussow@sae.org' [MBrussow@sae.org]; 'Meyer, Norm' [norm.meyer@tc.gc.ca]; Okawa, Naoyasu (N.) [okawa.n@mazda.co.jp]; 'Paulina.Carl@epamail.epa.gov' [Paulina.Carl@epamail.epa.gov]; Peabody, Jason (J.A.) [jpeabod6@ford.com]; ete Janosi [petejanosi@yahoo.com]; Suanne.Thomas@vw.com [Suanne.Thomas@vw.com]; 'takashi\_a\_fujiwara@ahm.honda.com' [takashi\_a\_fujiwara@ahm.honda.com]; iffany Jackson [JacksT2@nrd.nissan-usa.com]; homas Schrodt/AA/USEPA/US@EPA; "tom.beierschmitt@tema.toyota.com" ['tom.beierschmitt@tema.toyota.com']; 'tom.beierschmitt@tema.toyota.com' ['tom.beierschmitt@tema.toyota.com']; 'tommy\_chang@ahm.honda.com' ['tommy\_chang@ahm.honda.com']; 'William Meschievitz' [william.meschievitz@tema.toyota.com]; 'Khan, Farrukh' [KhanF@NRD.NISSAN-USA.COM]

**Cc:** Carl Paulina/AA/USEPA/US@EPA]

**From:** "Glodich, Jeffrey (J.M.)"

**Sent:** Tue 5/15/2012 11:23:29 AM

**Subject:** Cancelled: J2951 Phase II Review

Meeting canceled for this month.

**Purpose:**

- Discuss implementation and macro issues
- Revisit deferred issues that were not addressed in the initial publication

**Meeting Info:**

**Ex. 6**

Web Address <https://www.connectmeeting.att.com><<https://www.connectmeeting.att.com>>

**Ex. 6**



# Fuel drain for vehicle preconditioning

---

# Instruction manual

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powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung

page 1

date: 04/07/2009



# Fuel drain for vehicle preconditioning

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Vehicle preparation (for example: gasoline) ->diesel see page 7

1. Close the fuel line, mount a crimb pincer (yellow), see page 4.
2. Disconnect the fuel line from rail in the engine compartment.
3. Connect the T-piece between rail and fuel line with clips, see page 5.  
**Attention:** Carefully check all clips in the fuel line before you start the engine or pump!
4. Open the fuel line, remove the crimb pincer.

## Description of fuel drain (gasoline and diesel)

1. Change the original against a external prepared connector on the fuel pump.
2. Connect a drain line with a male connector at the quickconnector (QC).
3. Switch on the pump with external DC power supply (Voltage:12V/Current:20A).
4. After the fuel drain switch off the power supply.
5. Disconnect the drain line from the selfsealing female QC and close the QC with plug.

Look at the following pictures

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powertrain development

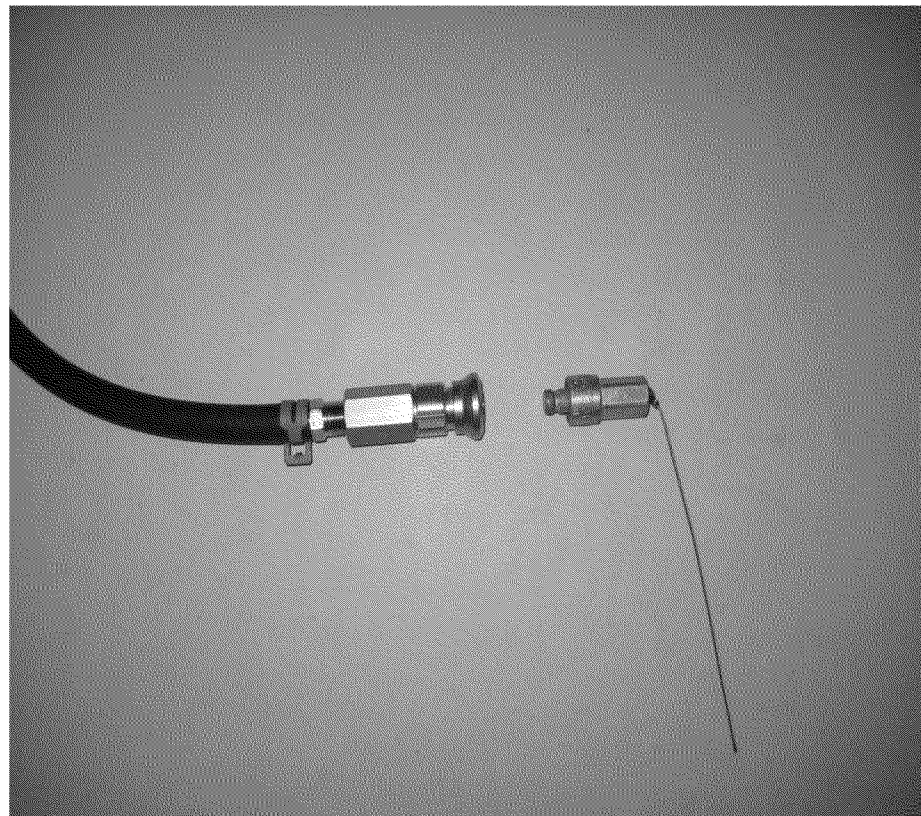
Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



# Fuel drain for vehicle preconditioning

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T-piece for fuel draining with selfsealing connector and plug (swagelok QC6)



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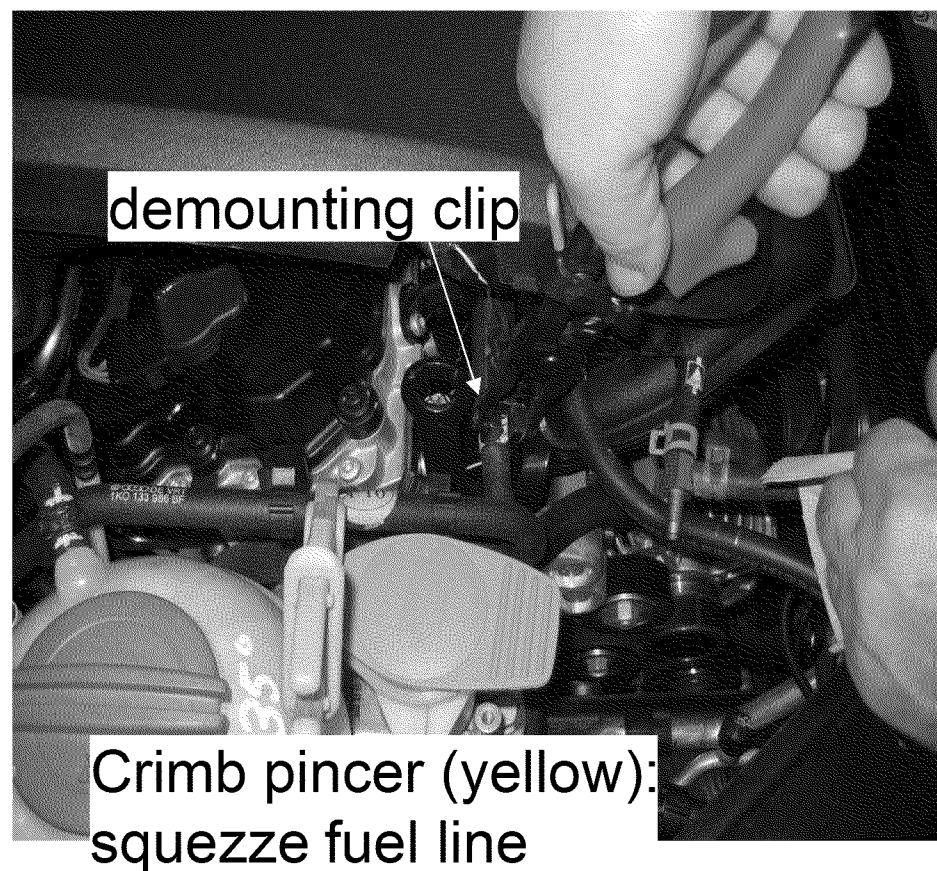
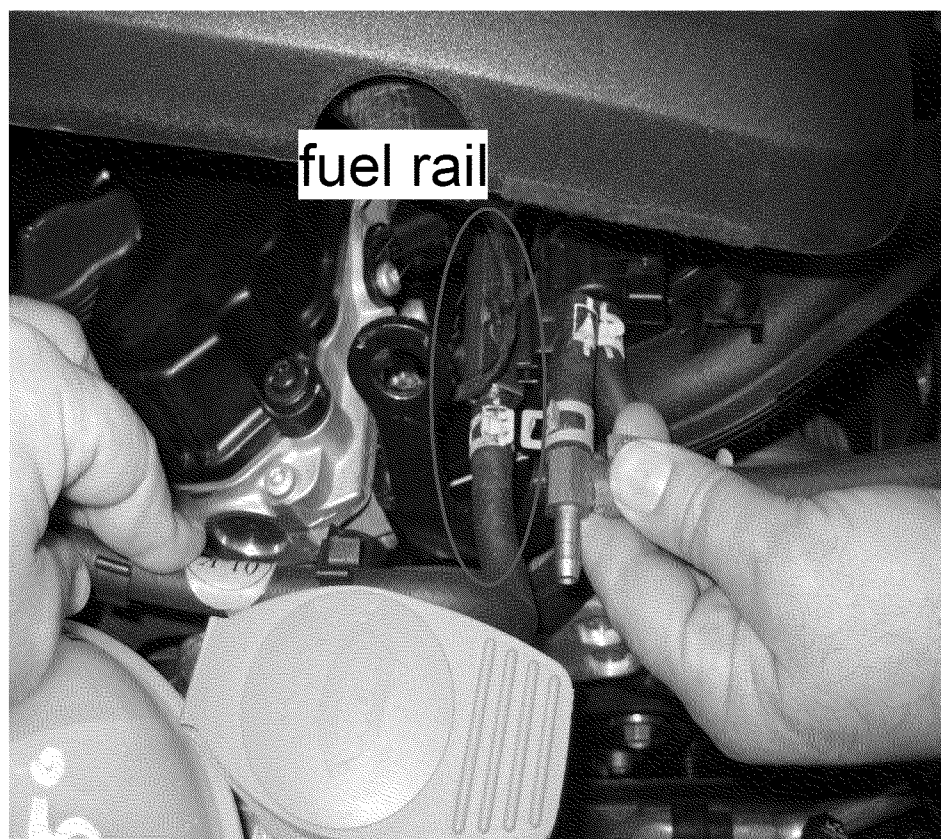
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# Fuel drain for vehicle preconditioning

**gasoline vehicle:** connection of T-piece in the fuel rail (engine compartment)



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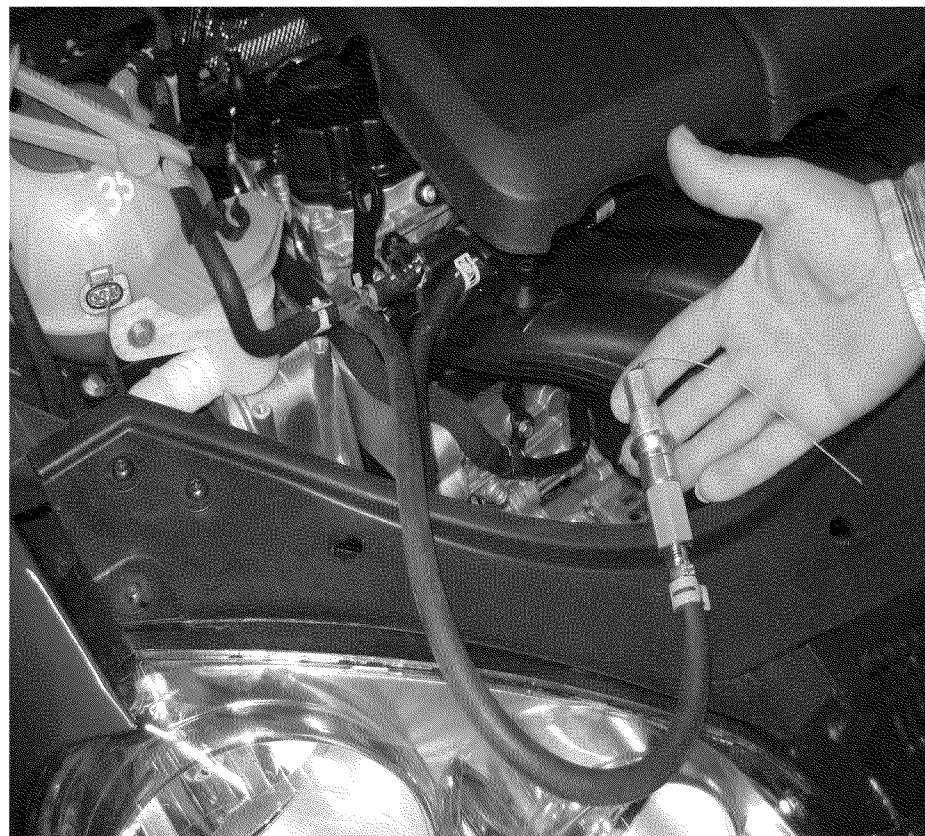
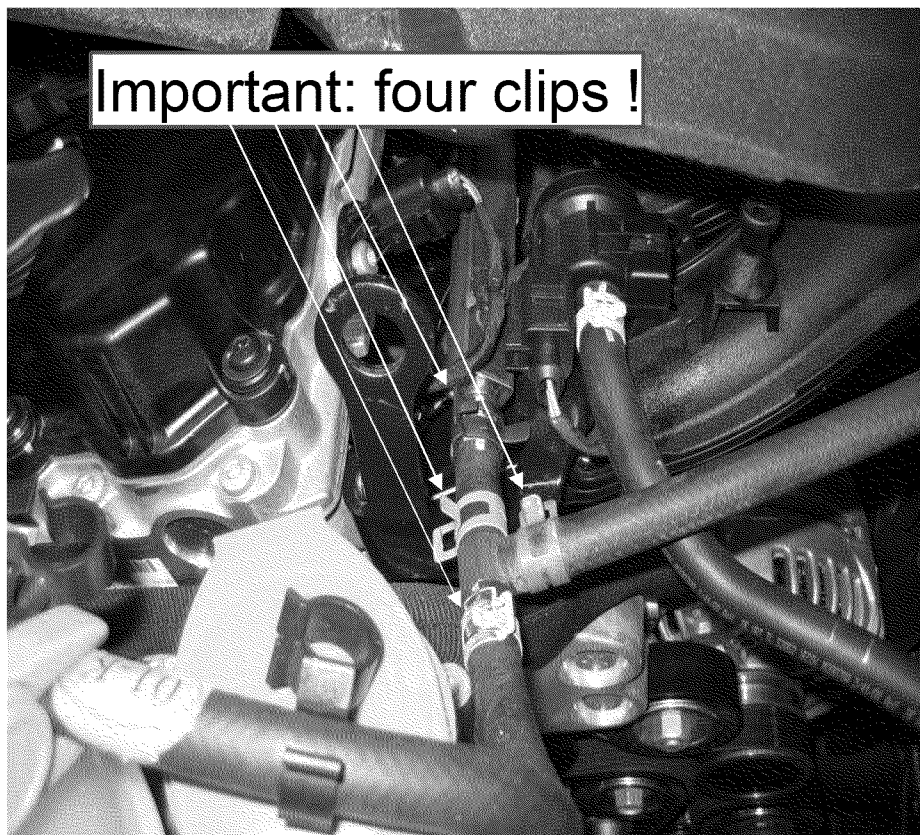
Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung





# Fuel drain for vehicle preconditioning

**gasoline vehicle:** connection of T-piece in the fuel rail (engine compartment)



powertrain development

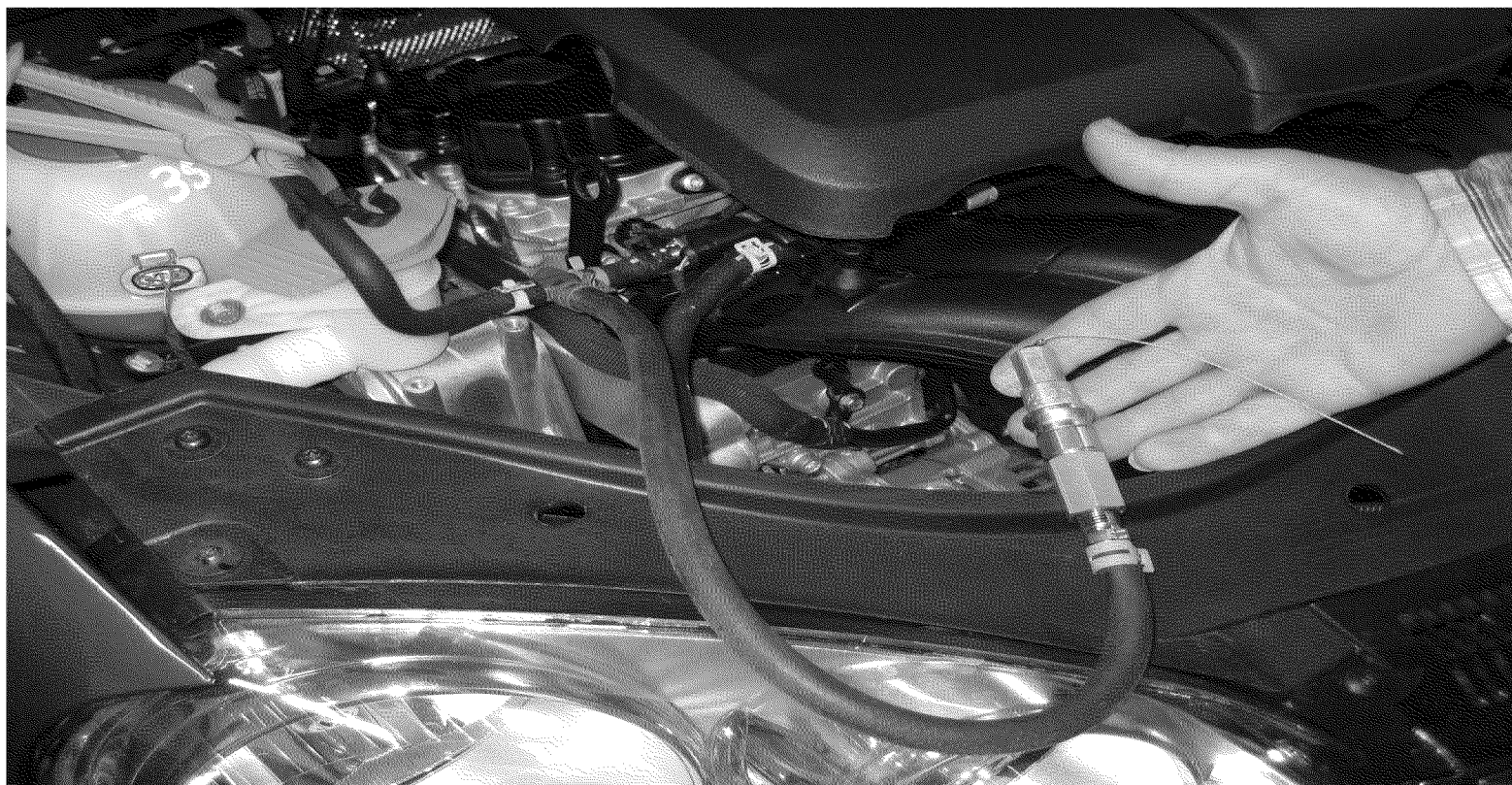
Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



# Fuel drain for vehicle preconditioning

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**gasoline vehicle:** T-piece in the fuel rail (engine compartment) **Attention:** check all clips (four) in the fuel line before you start the engine !



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# Fuel drain for vehicle preconditioning

---

***diesel vehicle:*** connection of T-piece in the fuel rail (engine compartment)



---

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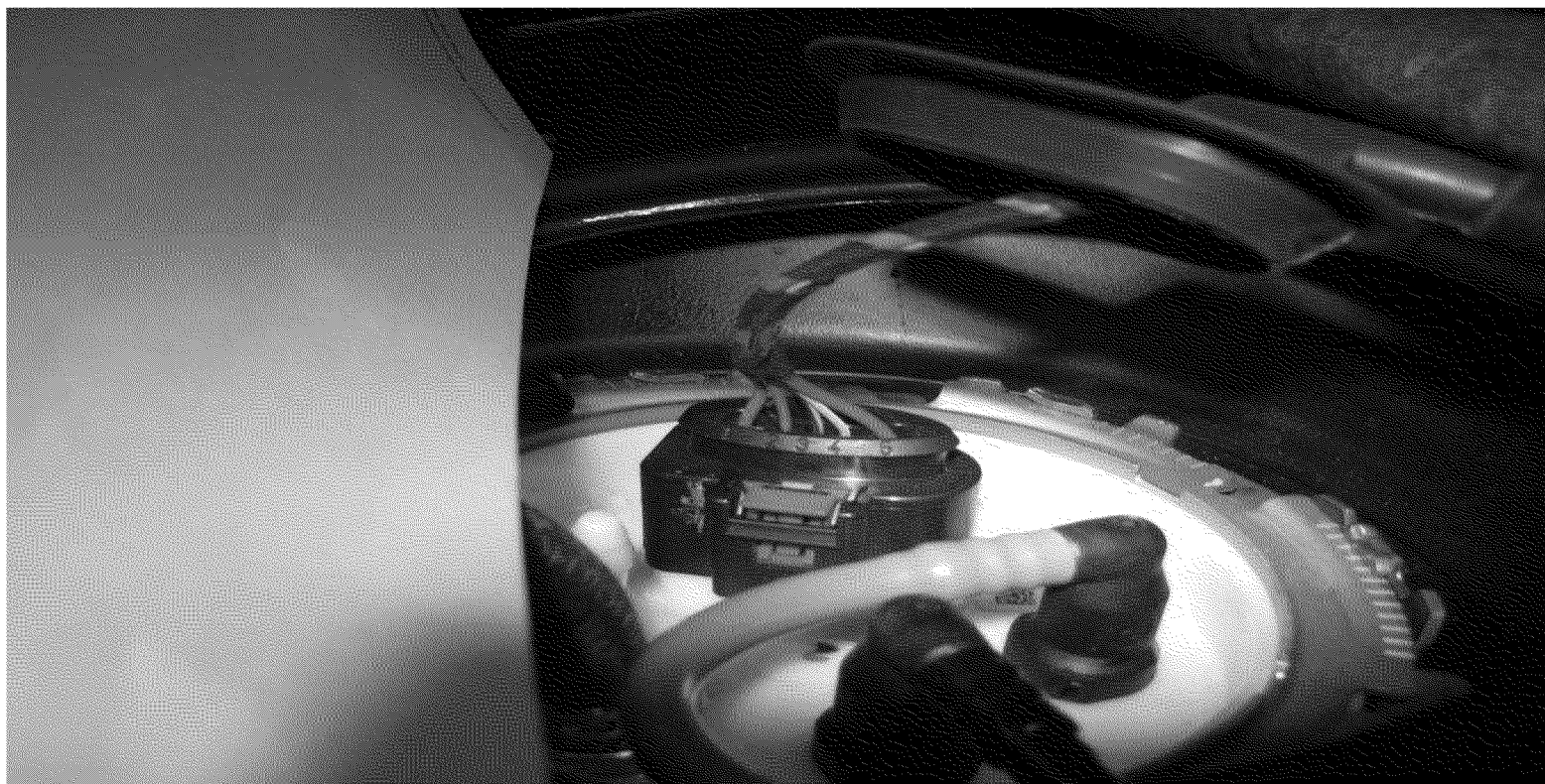




# Fuel drain for vehicle preconditioning

---

Fuel pump, electrical connector, original part (rear seats, right hand side)



---

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# Fuel drain for vehicle preconditioning

---

Fuel pump, electrical connector, disconnect original part



---

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# Fuel drain for vehicle preconditioning

---

Fuel pump, external electrical connector with DC power supply (red wire = plus blue or brown wire = negative pole)



---

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**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian (EEO)"  
**Sent:** Tue 5/15/2012 5:24:07 PM  
**Subject:** Re: In-use vehicles scheduled for next week  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>  
<mailto:Sohacki.Lynn@epamail.epa.gov>  
[Sebastian.Berenz@vw.com](mailto:Sebastian.Berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>  
<mailto:Sohacki.Lynn@epamail.epa.gov>  
[graycol.gif](#)

Hello Lynn,

We are right now at the car with URS personnel and check the vehicle in.

The traction control needs to be deactivated after every keycycle or start by press and hold the traction control button by the gear selector.

Mark will leave a note in the car for the lab.  
We make sure he knows the system.

Best regards

Sebastian

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Tuesday, May 15, 2012 01:13 PM  
To: Berenz, Sebastian (EEO)  
Cc: Bernd Liebner <Liebner.Bernd@epamail.epa.gov>  
Subject: RE: In-use vehicles scheduled for next week

Hi, Sebastian.

Once the traction control is deactivated, will it remain deactivated throughout the testing or will the testers need to deactivate the traction control every time the vehicle is started?

Regards,

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

"Berenz, Sebastian (EEO)" ---05/15/2012 10:19:38 AM---Hello Lynn, We will bring the description with us that explains the drain procedure. As far as start

From: "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Cc: Bernd Liebner/AA/USEPA/US@EPA  
Date: 05/15/2012 10:19 AM

Subject: RE: In-use vehicles scheduled for next week

Hello Lynn,

We will bring the description with us that explains the drain procedure. As far as starting the car, there are no special requirements. Only to deactivate traction control, which we will explain to the URS guys.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Tuesday, May 15, 2012 8:50 AM  
To: Berenz, Sebastian (EEO)  
Cc: Bernd Liebner  
Subject: RE: In-use vehicles scheduled for next week

Hi, Sebastian.

Please bring written instructions as well as planning on talking to URS at the time of maintenance. Our lab people will also need to know how to start the car so written directions will need to be placed into the vehicle.

Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

"Berenz, Sebastian (EEO)" ---05/14/2012 11:20:08 AM---Hello Lynn, Attached you will find the data for the Jetta 2.5I.

From: "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 05/14/2012 11:20 AM  
Subject: RE: In-use vehicles scheduled for next week

Hello Lynn,

Attached you will find the data for the Jetta 2.5I.

Since this is a SULEV(PZEV)/Bin3 concept, we asked for an additional preconditioning cycle (HWY) during the certification phase for in-use vehicles. (See attached pdf)  
Please perform a HWY after the regular FTP72 to precondition the vehicle.

Thank you very much. See you tomorrow.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Monday, May 14, 2012 10:37 AM  
To: Berenz, Sebastian (EEO)  
Subject: In-use vehicles scheduled for next week

Hi, Sebastian.

Listed below is the information for the vehicles that we have scheduled for next week.

R136RXX-0020 (2010 VW/Jetta) - VIN# Ex. 6 0800 Veh. Pick up on 5/15/12 (Tuesday)

Please use the form to send testing information to me for these vehicles before pick-up. Return the attached form in excel format so that the values may be automatically transferred to our testing network.

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

- \*disabling traction control, stability control and any load leveling the vehicle may have\*
- preferred method for loading the canister
- preferred fuel drain method
- any special starting procedures
- ABS disabling instructions
- for flex-fuel vehicles, the fuel switch procedure

I will pass this information along to our contractor, URS, and lab personnel. Paper copies or e-mails sent directly to URS or lab personnel may result in incorrect information being distributed.

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: parameters form.xlsx)[attachment "parameters form\_R136RXX-0020 .xlsx" deleted by Lynn Sohacki/AA/USEPA/US] [attachment "20110620171844239.pdf" deleted by Lynn Sohacki/AA/USEPA/US]  
[attachment "fuel\_drain.pdf" deleted by Lynn Sohacki/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 5/16/2012 1:54:20 PM  
**Subject:** VW Group - Decision Information for 3.0L TDI

Hello Jim,

We just submitted 2 Decision Information requests for the following related vehicles:

Test Group	VehicleID	Configuration	Model
DADXT03.03UG	D3UG-TAQ	0	Audi Q7
DADXT03.02UG	D3UG-TAQ	1	Volkswagen Touareg

Note, both of these vehicles are the EDV for their test groups. While the test group and models are carryover, these vehicles represent a new generation for the engine with updated hardware and software. Please contact me if you have any questions.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207





**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Wed 5/16/2012 7:45:41 PM  
**Subject:** In-use vehicles scheduled for next week  
[parameters form.xlsx](#)

Hi, Sebastian.

Listed below is the information for the vehicles that we have scheduled for next week.

R136RXX-0088 (2010 VW/Jetta) - VIN# Ex. 6 0700 Veh. Pick up on 5/22/12 (Tuesday)

R136RXX-0014 (2010 VW/Jetta) - VIN# Ex. 6 0800 Veh. Pick up on 5/23/12 (Wednesday)

Please use the form to send testing information to me for these vehicles before pick-up. Return the attached form in excel format so that the values may be automatically transferred to our testing network.

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

- \*disabling traction control, stability control and any load leveling the vehicle may have\*
- preferred method for loading the canister
- preferred fuel drain method
- any special starting procedures
- ABS disabling instructions
- for flex-fuel vehicles, the fuel switch procedure

I will pass this information along to our contractor, URS, and lab personnel. Paper copies or e-mails sent directly to URS or lab personnel may result in incorrect information being distributed.

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 5/16/2012 7:57:47 PM  
**Subject:** Re: VW Group - Decision Information for 3.0L TDI

Why are they separate test groups if they are the same test vehicle? Is the SFTP composite marginal on the heavy one?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 05/16/2012 09:54 AM  
Subject: VW Group - Decision Information for 3.0L TDI

Hello Jim,

We just submitted 2 Decision Information requests for the following related vehicles:

Test Group	VehicleID	Configuration	Model
DADXT03.03UG	D3UG-TAQ	0	Audi Q7
DADXT03.02UG	D3UG-TAQ	1	Volkswagen Touareg

Note, both of these vehicles are the EDV for their test groups. While the test group and models are carryover, these vehicles represent a new generation for the engine with updated hardware and software. Please contact me if you have any questions.

Regards,  
Mike  
Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 5/16/2012 8:26:55 PM  
**Subject:** RE: VW Group - Decision Information for 3.0L TDI  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hi Jim,

You are correct, the heavier Q7 is tighter against the Touareg standard. That is the reason for the split since MY 2011.

Regards,

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, May 16, 2012 3:58 PM  
To: Giles, Michael (EEO)  
Subject: Re: VW Group - Decision Information for 3.0L TDI

Why are they separate test groups if they are the same test vehicle? Is the SFTP composite marginal on the heavy one?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 05/16/2012 09:54 AM  
Subject: VW Group - Decision Information for 3.0L TDI

Hello Jim,

We just submitted 2 Decision Information requests for the following related vehicles:

Test Group	VehicleID	Configuration	Model
DADXT03.03UG	D3UG-TAQ	0	Audi Q7
DADXT03.02UG	D3UG-TAQ	1	Volkswagen Touareg

Note, both of these vehicles are the EDV for their test groups. While the test group and models are carryover, these vehicles represent a new generation for the engine with updated hardware and software. Please contact me if you have any questions.

Regards,  
Mike  
Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 5/16/2012 9:04:57 PM  
**Subject:** Bentley Mulsanne

Bill, I was checking the CFR and a coworker pointed to a more recent section with regard to test vehicle selection. 86.1828-01 is more general in the criteria for worse case. Part e and f of 1828 along with 86.1839-01 (carryover) allow for criteria beyond test weight/RLHP/NV to determine worse case. Bentley needs to submit data explaining why they think the previous configuration is worse for emission than the new one. Emissions data or catalyst temperature comparisons are best but see what they have.

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Compliance Division  
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(734) 214-4946  
snyder.jim@epa.gov

**To:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 5/16/2012 9:13:57 PM  
**Subject:** Re: Bentley Mulsanne

Bill, was this primarily for EDV or was B hoping to carryover Fuel economy too? I can consider EDV carryover but I think it will be hard to not have a new configuration for FEDV.

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From: Jim Snyder/AA/USEPA/US  
To: "Rodgers, William" <William.Rodgers@vw.com>  
Date: 05/16/2012 05:04 PM  
Subject: Bentley Mulsanne

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(734) 214-4946  
snyder.jim@epa.gov

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 5/17/2012 11:08:06 AM  
**Subject:** RE: Bentley Mulsanne  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Jim,

There will be one configuration (#6500 only) for the Mulsanne. This means using substitute data from the previous model year which had different ETW/RLHP. Only one set test of data will represent the entire test group for emissions and fuel economy.

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, May 16, 2012 5:14 PM  
To: Jim Snyder  
Cc: Rodgers, William (EEO)  
Subject: Re: Bentley Mulsanne

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From: Jim Snyder/AA/USEPA/US  
To: "Rodgers, William" <[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)>  
Date: 05/16/2012 05:04 PM  
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snyder.jim@epa.gov



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 5/17/2012 11:37:18 AM  
**Subject:** RE: Bentley Mulsanne  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Jim,

I just spoke to Bentley. I think I was successful in persuading them to just present a complete set of new test data instead of burning up valuable hours trying to justifying the comparability of the two vehicles.

Thanks for your help.

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, May 16, 2012 5:14 PM  
To: Jim Snyder  
Cc: Rodgers, William (EEO)  
Subject: Re: Bentley Mulsanne

Bill, was this primarily for EDV or was B hoping to carryover Fuel economy too? I can consider EDV carryover but I think it will be hard to not have a new configuration for FEDV.

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[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

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To: "Rodgers, William" <William.Rodgers@vw.com>  
Date: 05/16/2012 05:04 PM  
Subject: Bentley Mulsanne

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snyder.jim@epa.gov



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number:

Equivalent Test Weight:  Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:  Gallons 40% Fill  Gallons

Drive Axle:  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

A  Lb-force

B  Lb-force\*mpH

C  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_

**To:** "Berenz, Sebastian (EEO)" [Sebastian.Berenz@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Thur 5/17/2012 12:56:43 PM  
**Subject:** Re: R136RXX-0020 - [Ex. 6] Jetta  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Thank you, Sebastian.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

**From:** "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
**To:** Lynn Sohacki/AA/USEPA/US@EPA  
**Date:** 05/17/2012 08:30 AM  
**Subject:** R136RXX-0020 - [Ex. 6] Jetta

Hello Lynn,

Here is the update for R136RXX-0020 [Ex. 6] Jetta.  
I will send the other two parameter sheets out as soon as I have them finished.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!  
[attachment "parameters form\_R136RXX-0020 .xlsx" deleted by Lynn Sohacki/AA/USEPA/US]

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian (EEO)"  
**Sent:** Thur 5/17/2012 1:05:35 PM  
**Subject:** RE: In-use vehicles scheduled for next week  
[parameters form\\_R136RXX-0014.xlsx](#)  
[parameters form\\_R136RXX-0088.xlsx](#)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

Attached you will find the two parameter sheets for the vehicles we will get next week.

They are all identical due to the parameters.

Whenever I get a call from URS, we will come down to Ann Arbor and check the Jetta's in.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Wednesday, May 16, 2012 3:46 PM  
To: Berenz, Sebastian (EEO)  
Subject: In-use vehicles scheduled for next week

Hi, Sebastian.

Listed below is the information for the vehicles that we have scheduled for next week.

R136RXX-0088 (2010 VW/Jetta) - VIN# Ex. 6, 0700 Veh. Pick up on 5/22/12 (Tuesday)

R136RXX-0014 (2010 VW/Jetta) - VIN# Ex. 6 0800 Veh. Pick up on 5/23/12 (Wednesday)

Please use the form to send testing information to me for these vehicles before pick-up. Return the attached form in excel format so that the values may be automatically transferred to our testing network.

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

- \*disabling traction control, stability control and any load leveling the vehicle may have\*
- preferred method for loading the canister
- preferred fuel drain method
- any special starting procedures
- ABS disabling instructions
- for flex-fuel vehicles, the fuel switch procedure

I will pass this information along to our contractor, URS, and lab personnel. Paper copies or e-mails sent directly to URS or lab personnel may result in incorrect information being distributed.

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: parameters form.xlsx)



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

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- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

A  Lb-force

B  Lb-force\*mpH

C  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_



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Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

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EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_



**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 5/17/2012 2:36:47 PM  
**Subject:** RE: Bentley Mulsanne  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Good. That makes sense.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 05/17/2012 07:37 AM  
**Subject:** RE: Bentley Mulsanne

Jim,  
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Bill

**From:** Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
**Sent:** Wednesday, May 16, 2012 5:14 PM  
**To:** Jim Snyder  
**Cc:** Rodgers, William (EEO)  
**Subject:** Re: Bentley Mulsanne

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To: "Rodgers, William" <William.Rodgers@vw.com>  
Date: 05/16/2012 05:04 PM  
Subject: Bentley Mulsanne

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snyder.jim@epa.gov

**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Thur 5/17/2012 3:49:55 PM  
**Subject:** 2013 Volkswagen & Audi Fuel Economy  
[winmail.dat](#)

Hello Bob;

Before Verify release 10 was came out, I successfully entered an Audi allroad quattro label signed on as Volkswagen (VWX). I am entering more models within the same Audi test group and with Audi carline names and received the following error messages.

Transaction Status Details

Transaction Status Identifier : REJECTED

Transaction Message Text : LD-FE-GL-BR202 - If the Manufacturer Code of the owner of the Representative Test Group (GL-13.5) is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the Test Group. (Test Group = DAD XV02.03UB)

Transaction Message Text : LD-FE-GL-BR003 - The Submitter's Manufacturer Code (in Submission Author Details) must match the Carline Manufacturer Code (GL-10).

We then gave Volkswagen (VWX), permission to use the Audi test group DAD XV02.03UB and one message went away but the BR003 message remains. We don't want to create Audi carlines in VWX and ask if it would be possible for the label program to ignore the AD and VW in the test group and carline?

I wanted to enter everything under the VWX sign-on so that when it comes time to do CAFE and GHG fleets it doesn't take six months to process the reports. What do you suggest?

I need to resolve this soon because, I have several Audi models in this 2.0L test group that will be released from the ports next week.

I will be back after lunch, if you can touch base with me this afternoon it will help me a lot, I'm sure.

Thanks,  
Richard 248 754 4213

Hello Bob;

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Thanks,

Richard 248 754 4213

**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Thur 5/17/2012 6:09:12 PM  
**Subject:** phone message  
[winmail.dat](#)

Hi Dave;

I got your message but because we have a new crap phone system I am unable to call. I agree with what you said about the name on a certificate. Bentley would, for example, hold a certificate with their name on it and not VW. I will proceed with using the Audi sign on to do my 2013 Audi labels, unless I hear of some other solution from Bob.

Thanks,  
Richard.

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 5/17/2012 8:19:42 PM  
**Subject:** 2013 data in Verify as of May 11,2012 5PM is attached  
VW Group 2013 FEGuide1-all rel dates-no-sales-5-11-2012.xlsx

Richard,

You are correct. According to the Data Elements, the mfr code field in the FE Label module (GL-2) is assigned by Verify---it is derived by Verify from the users' CDX account.

Attached is the VW/Audi data in Verify just prior to deploying Release 10.

EPA comr	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013	Audi	Bentley	Continenta	ADX	8	4.0 8
		2013	Audi	Bentley	Continenta	ADX	7	4.0 8
Relabeled.	Please include i	2013	Volkswage	Audi	A8	VWX	28	3.0 6
Relabeled.	Please include i	2013	Volkswage	Audi	A8L	VWX	29	3.0 6
		2013	Volkswage	Audi	A8L	VWX	9	6.3 12
		2013	Volkswage	Audi	allroad que	VWX	34	2.0 4
		2013	Volkswage	Bentley Mc	Continenta	VWX	10	6.0 12
		2013	Volkswage	Bentley Mc	Continenta	VWX	13	6.0 12
		2013	Volkswage	Bentley Mc	Continenta	VWX	11	6.0 12
		2013	Volkswage	Bentley Mc	Continenta	VWX	12	6.0 12
Warning - if trans type is Audi		2013	Volkswage	Volkswage	BEETLE	VWX	19	2.0 4
		2013	Volkswage	Volkswage	BEETLE	VWX	17	2.5 5
		2013	Volkswage	Volkswage	BEETLE	VWX	27	2.5 5
Warning - if trans type is Audi		2013	Volkswage	Volkswage	BEETLE CV	VWX	20	2.0 4
		2013	Volkswage	Volkswage	BEETLE CV	VWX	18	2.5 5
Warning - if trans type is Audi		2013	Volkswage	Volkswage	CC	VWX	1	2.0 4
		2013	Volkswage	Volkswage	CC	VWX	4	2.0 4
		2013	Volkswage	Volkswage	CC	VWX	2	3.6 6
		2013	Volkswage	Volkswage	CC 4MOTIV	VWX	3	3.6 6
		2013	Volkswage	Volkswage	GOLF	VWX	16	2.5 5
		2013	Volkswage	Volkswage	GOLF	VWX	26	2.5 5
		2013	Volkswage	Volkswage	GTI	VWX	23	2.0 4
		2013	Volkswage	Volkswage	Jetta	VWX	15	2.5 5
		2013	Volkswage	Volkswage	Jetta	VWX	25	2.5 5
		2013	Volkswage	Volkswage	JETTA SP	VWX	14	2.5 5
		2013	Volkswage	Volkswage	JETTA SP	VWX	24	2.5 5



Trans in FE	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S8)	17	28	21	100.314-08 states label values must not change for entire model year, except for 2008, 2009, 2010, 2011, 2012, 2013, 2014-08(					
Auto(S8)	17	28	21	100.314-08 states label values must not change for entire model year, except for 2008, 2009, 2010, 2011, 2012, 2013, 2014-08(					
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S6)	22	30	25				26.5	42.0656	31.7942
Auto(S6)	22	29	25				27.3831	39.0128	31.6255
Manual(M6)	22	31	25				26.4199	42.8586	31.9312
Auto(S6)	21	29	24				26.8	40.2092	31.532
Auto(S6)	21	27	23				26.0395	37.7702	30.2701
Auto(S6)	22	31	25				26.977	42.4936	32.2814
Manual(M6)	21	32	25				25.7923	44.3415	31.7736
Auto(S6)	17	27	21				21.2	35.1	25.7972
Auto(S6)	17	25	20				20.5	33.5	24.8373
Auto(S6)	24	31	26				28.0549	42.473	33.1132
Manual(M6)	23	33	26				26.3044	44.5088	32.2378
Manual(M6)	21	31	25				26.0527	41.2042	31.2185
Auto(S6)	24	31	26				28.0549	42.473	33.1132
Manual(M6)	23	33	26				26.3044	44.5088	32.2378
Auto(S6)	24	31	26				28.0549	42.473	33.1132
Manual(M6)	23	33	26				26.3044	44.5088	32.2378

City	Model	Year	Unrd Comb Unr	Guzzler?	Air Aspir	IAir Aspira	Trans	Trans Des	Trans, Otr	# Gears
15.0109	24.4645	18.1706			TC	Turbochar	SA	Semi-Auto		8
14.0639	23.9773	17.2786	G		TC	Turbochar	SA	Semi-Auto		8
e)(47.8659	27.6205	20.7058			SD	Superchar	SA	Semi-Auto		8
e)(47.8659	27.6205	20.7058			SD	Superchar	SA	Semi-Auto		8
13.1387	20.6025	15.6978	G		NA	Naturally	ASA	Semi-Auto		8
19.9584	26.6824	22.5112			TC	Turbochar	SA	Semi-Auto		8
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto		6
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto		6
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto		6
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto		6
22.0202	29.5574	24.8746			TC	Turbochar	SA	Semi-Auto		6
22.2863	28.5683	24.7338			NA	Naturally	ASA	Semi-Auto		6
21.7202	30.6767	25.0054			NA	Naturally	AM	Manual		5
21.1383	28.6751	23.9738			TC	Turbochar	SA	Semi-Auto		6
21.2302	26.9749	23.4804			NA	Naturally	ASA	Semi-Auto		6
21.8706	31.0367	25.2227			TC	Turbochar	SA	Semi-Auto		6
20.9361	31.656	24.7			TC	Turbochar	M	Manual		6
17.4935	26.5716	20.6716			NA	Naturally	ASA	Semi-Auto		6
16.9415	25.219	19.8774			NA	Naturally	ASA	Semi-Auto		6
23.6446	31.0458	26.486			NA	Naturally	ASA	Semi-Auto		6
22.7343	32.7402	26.3594			NA	Naturally	AM	Manual		5
21.2839	30.8324	24.7304			TC	Turbochar	M	Manual		6
23.6446	31.0458	26.486			NA	Naturally	ASA	Semi-Auto		6
22.7343	32.7402	26.3594			NA	Naturally	AM	Manual		5
23.6446	31.0458	26.486			NA	Naturally	ASA	Semi-Auto		6
22.7343	32.7402	26.3594			NA	Naturally	AM	Manual		5

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Y	N	A	All Wheel IDADXV04.	10			GP	Gasoline (I	
Y	N	A	All Wheel IDADXV04.	10			GP	Gasoline (I	
Y	N	A	All Wheel IDADXJ03.	10			GP	Gasoline (I	
Y	N	A	All Wheel IDADXJ03.	10			GP	Gasoline (I	
Y	N	A	All Wheel IDVWXV06	10			GP	Gasoline (I	
Y	N	A	All Wheel IDADXV02.	10			GP	Gasoline (I	
Y	N	A	All Wheel IDBEXV06.	85	333		GP	Gasoline (I	
Y	N	A	All Wheel IDBEXV06.	85	333		GP	Gasoline (I	
Y	N	A	All Wheel IDBEXV06.	85	333		GP	Gasoline (I	
Y	N	A	All Wheel IDBEXV06.	85	333		GP	Gasoline (I	
N	N	F	2-Wheel DDVWXJ02.	10			GP	Gasoline (I	
Y	N	F	2-Wheel DDVWXV02	10			G	Gasoline (I	
N	N	F	2-Wheel DDVWXV02	10			G	Gasoline (I	
N	N	F	2-Wheel DDVWXJ02.	10			GP	Gasoline (I	
Y	N	F	2-Wheel DDVWXV02	10			G	Gasoline (I	
N	N	F	2-Wheel DDVWXJ02.	10			GP	Gasoline (I	
N	N	F	2-Wheel DDVWXJ02.	10			GP	Gasoline (I	
Y	N	F	2-Wheel DDVWXV03	10			GP	Gasoline (I	
Y	N	A	All Wheel IDVWXV03	10			GP	Gasoline (I	
Y	N	F	2-Wheel DDVWXV02	10			G	Gasoline (I	
N	N	F	2-Wheel DDVWXV02	10			G	Gasoline (I	
N	N	F	2-Wheel DDADXV02.	10			GP	Gasoline (I	
Y	N	F	2-Wheel DDVWXV02	10			G	Gasoline (I	
N	N	F	2-Wheel DDVWXV02	10			G	Gasoline (I	
Y	N	F	2-Wheel DDVWXV02	10			G	Gasoline (I	
N	N	F	2-Wheel DDVWXV02	10			G	Gasoline (I	

Product Name	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MPG leaded (Recommended)	Not exemp		89	11				
MPG leaded (Recommended)	Not exemp		86	7				
MPG leaded (Recommended)	Not exempt				100	15		
MPG leaded (Recommended)	Not exempt				107	15		
MPG leaded (Recommended)	Not exempt				109	13		
MPG leaded (Recommended)	Not exempt				90	28		
MPG leaded (Recommended)	Not exemp		102	13				
MPG leaded (Recommended)	Not exemp		89	11				
MPG leaded (Recommended)	Not exemp		86	7				
MPG leaded (Recommended)	Not exemp		86	7				
MPG leaded (Recommended)	Not exempt						85	12
MPG leaded (Recommended)	Not exempt						85	12
MPG leaded (Recommended)	Not exempt						85	12
MPG leaded (Recommended)	Not exemp		81	7				
MPG leaded (Recommended)	Not exemp		81	7				
MPG leaded (Recommended)	Not exemp		94	13				
MPG leaded (Recommended)	Not exemp		94	13				
MPG leaded (Recommended)	Not exemp		94	13				
MPG leaded (Recommended)	Not exemp		94	13				
MPG leaded (Recommended)	Not exempt						94	15
MPG leaded (Recommended)	Not exempt						94	15
MPG leaded (Recommended)	Not exempt						94	15
MPG leaded (Recommended)	Not exempt				94	16		
MPG leaded (Recommended)	Not exempt				94	16		
MPG leaded (Recommended)	Not exempt				92	33		
MPG leaded (Recommended)	Not exempt				92	33		

Annual Fuel	EPA Calculated	Comment	City2 FE (l/100mi)	Hwy2 FE (l/100mi)	Comb2 FE (l/100mi)	Low'd City (l/100mi)	Low'd Hwy (l/100mi)	Low'd Cor (l/100mi)	City2 Unadjusted
3150	3150								
3350	3350								
2700	2700	rerun for number of engine valves correction, Relabel after EPA confirmatory city tests for activ							
2700	2700	rerun for number of engine valves correction, Relabel after EPA confirmatory city tests for activ							
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32							
2500	2500								
4050	4050		8	13	10				9.5
4050	4050		8	14	10				10.3
4050	4050		8	13	10				9.5
4050	4050		8	14	10				10.3
2300	2300	CORRECTED ANNUAL FUEL COST							
2150	2150								
2150	2150	corrected annual fuel cost							
2400	2400	annual fuel cost corrected							
2300	2300	corrected annual fuel cost							
2300	2300	adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG an							
2300	2300	EPA has assigned new test numbers							
2700	2700								
2850	2850								
2050	2050								
2050	2050								
2300	2300								
2050	2050								
2050	2050								
2050	2050								
2050	2050								

Highway Fuel Economy (City/Highway/Combined) - Alternative Fuel  
 Highway Fuel Economy (City/Highway/Combined) - Fuel2 Use Fuel2 Use Fuel2 Unit Fuel2 Unit

e and deactive start/stop system  
 e and deactive start/stop system

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E MPG	miles per g

d corresponding 5-cycle values

Relative Fuel		Intake Val	Exhaust V	Carline CI	Carline CI	Car/Truck	Calc Appr	Sales
4650	4650	SIDI;	2	24	Compact C	car	Vehicle Specific	5-cycle label
		SIDI;	2	23	Subcompact	car	Vehicle Specific	5-cycle label
		SIDI; Unde	2	25	Midsize C	car	Vehicle Specific	5-cycle label
		SIDI; Unde	2	26	Large Cars	car	Vehicle Specific	5-cycle label
		SIDI;	2	26	Large Cars	car	Vehicle Specific	5-cycle label
		SIDI;	2	27	Small Static	car	Derived	5-cycle label
		FFV;	2	25	Midsize C	car	Vehicle Specific	5-cycle label
		FFV;	2	24	Compact C	car	Vehicle Specific	5-cycle label
		FFV;	2	23	Subcompact	car	Vehicle Specific	5-cycle label
		FFV;	2	23	Subcompact	car	Vehicle Specific	5-cycle label
		SIDI;	2	23	Subcompact	car	Vehicle Specific	5-cycle label
			2	23	Subcompact	car	Vehicle Specific	5-cycle label
			2	23	Subcompact	car	Vehicle Specific	5-cycle label
		SIDI;	2	23	Subcompact	car	Derived	5-cycle label
			2	23	Subcompact	car	Vehicle Specific	5-cycle label
		SIDI;	2	24	Compact C	car	Vehicle Specific	5-cycle label
		SIDI;	2	24	Compact C	car	Vehicle Specific	5-cycle label
		SIDI;	2	24	Compact C	car	Vehicle Specific	5-cycle label
		SIDI;	2	24	Compact C	car	Vehicle Specific	5-cycle label
			2	24	Compact C	car	Vehicle Specific	5-cycle label
	2	24	Compact C	car	Vehicle Specific	5-cycle label		
SIDI;	2	24	Compact C	car	Vehicle Specific	5-cycle label		
	2	25	Midsize C	car	Vehicle Specific	5-cycle label		
	2	25	Midsize C	car	Vehicle Specific	5-cycle label		
	2	27	Small Static	car	Vehicle Specific	5-cycle label		
	2	27	Small Static	car	Vehicle Specific	5-cycle label		

Release Date	DEPA FE Label Dataset ID	Due Label Rec	Relabel	Relabel D	Suppress	Police/Em	Comment
4/9/2012	9570	N	N		N	N	Engine Co
4/9/2012	9569	N	N		N	N	Engine Co
2013/2/12	9045	Previous values were XX MPG city, XX MPG highway, and XX MPG combined;	Relabel	XX MPG combined;	N		
2013/2/12	9045	Previous values were XX MPG city, XX MPG highway, and XX MPG combined;	Relabel	XX MPG combined;	N		
8/6/2012	9637	N	N		N	N	
4/26/2012	9876	N	N		N	N	
3/30/2012	9633	N	N		N	N	Continenta
3/30/2012	9636	N	N		N	N	Continenta
3/30/2012	9634	N	N		N	N	Continenta
3/30/2012	9635	N	N		N	N	Continenta
7/30/2012	9631	N	N		N	N	
7/30/2012	9628	N	N		N	N	
7/30/2012	9666	N	N		N	N	
7/30/2012	9667	N	N		N	N	
7/30/2012	9638	N	N		N	N	
11/16/2012	9115	N	N		N	N	
11/25/2012	9110	N	N		N	N	
11/16/2012	9035	N	N		N	N	
11/16/2012	9036	N	N		N	N	
7/30/2012	9627	N	N		N	N	
7/30/2012	9649	N	N		N	N	
7/30/2012	9770	N	N		N	N	ENGINE C
7/30/2012	9626	N	N		N	N	
7/30/2012	9648	N	N		N	N	
7/30/2012	9625	N	N		N	N	
7/30/2012	9647	N	N		N	N	



Cyl Deact	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Energy St	Energy St	# Batteries	Battery Ty
X.	There are 2 dual chargers but a common charge and intercooler for both banks. All is located between the cylinder								
X.	There are 2 dual chargers but a common charge and intercooler for both banks. All is located between the cylinder								
N		Y	CONTINUOUS		AUDI VALVE				
N		Y	CONTINUOUS		AUDI VALVE				
N		Y	Intake and N						
N		Y	CONTINUOUS		AUDI VALVE				
\$pur		Y	INLET AN IN						
\$pur		Y	INLET AN IN						
\$pur		Y	INLET AN IN						
\$pur		Y	INLET AN IN						
N		Y	position of N						
N		Y	INLET CO IN						
N		Y	INLET CO IN						
N		Y	position of N						
N		Y	INLET CO IN						
N		Y	position of N						
N		Y	position of N						
N		Y	position of N						
N		Y	INLET CO IN						
N		Y	INLET CO IN						
NMA ONLY.		Y	CONTINUOUS						
N		Y	INLET CO IN						
N		Y	INLET CO IN						
N		Y	INLET CO IN						
N		Y	INLET CO IN						

Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit	Regen Br	Regen Br	Regen Br
es andes (spec)	ed No	ed No	ed No	ed No	ed No	ed No	ed No	ed No	ed No
es andes (spec)	ed No	ed No	ed No	ed No	ed No	ed No	ed No	ed No	ed No

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brake Source (Front, Rear, Both)  
Driver Cnt Fuel Cell Usable H2 Fuel Cell (HEV-EV C# Drive M Motor Ger Motor Ger Rated Mot Fuel Meter  
ater than 40C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh  
ater than 40C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh

W01 Desc	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell V	Off Board	Camless V	Oil Viscosi	Eng Mgmt	Eng Mgmt	Trans in FE
	GDI	Spark Ignit			N		5W30 VW N	No		Auto(S8)
	GDI	Spark Ignit			N		5W30 VW N	No		Auto(S8)
	GDI	Spark Ignit			N		5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit			N		5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit			N		5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit			N		5W40 VW N	No		Auto(S8)
	MFI	Multipoint/:	N		N		5W30 VW N	No		Auto(S6)
	MFI	Multipoint/:	N		N		5W30 VW N	No		Auto(S6)
	MFI	Multipoint/:	N		N		5W30 VW N	No		Auto(S6)
	MFI	Multipoint/:	N		N		5W30 VW N	No		Auto(S6)
	GDI	Spark Ignit			N		5W40 VW N	No		Auto(S6)
	MFI	Multipoint/:			N		10W40 / V N	No		Auto(S6)
	MFI	Multipoint/:			N		10W40 / V N	No		Manual(M6)
	GDI	Spark Ignit			N		5W40 VW N	No		Auto(S6)
	MFI	Multipoint/:			N		10W40 / V N	No		Auto(S6)
	GDI	Spark Ignit			N		5W40 VW N	No		Auto(S6)
	GDI	Spark Ignit			N		5W40 VW N	No		Manual(M6)
	GDI	Spark Ignit			N		5W-40 VW N	No		Auto(S6)
	GDI	Spark Ignit			N		5W-40 VW N	No		Auto(S6)
	MFI	Multipoint/:			N		10W40 / V N	No		Auto(S6)
	MFI	Multipoint/:			N		10W40 / V N	No		Manual(M6)
	GDI	Spark Ignit	N		N		5W40 N	No		Manual(M6)
	MFI	Multipoint/:			N		10W40 / V N	No		Auto(S6)
	MFI	Multipoint/:			N		10W40 / V N	No		Manual(M6)
	MFI	Multipoint/:			N		10W40 / V N	No		Auto(S6)
	MFI	Multipoint/:			N		10W40 / V N	No		Manual(M6)

MFR Data with data entered after May 18, 2011			
Hand as type	Charge De	Charge By	Charge Su
EPA Calcul	EPA Calcul	MFR Calcul	EPA Calcul
Auto(S8)			23.6
Auto(S8)			21.8
Auto(S8) A8L			26.1
Auto(S8) A8L			26.1
Auto(S8)			19.3
Auto(S8)			29.5
Auto(S6)			17.2
Auto(S6)			17.4
Auto(S6)			17.2
Auto(S6)			17.4
Auto(S6)			31.8
Auto(S6)			31.6
Manual(M5			31.9
Auto(S6)			31.5
Auto(S6)			30.3
Auto(S6)			32.3
Manual(M6CC M6			31.8
Auto(S6)			25.8
Auto(S6)			24.8
Auto(S6)			33.1
Manual(M5			32.2
Manual(M6			31.2
Auto(S6)			33.1
Manual(M5			32.2
Auto(S6)			33.1
Manual(M5			32.2

**MPB Coils Indicator (Y or N) P Mfr Contact (Rel 8)**

[illegible]

**To:** Jim Snyder/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; inc Wehrly/AA/USEPA/US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Vieser, Steffen (I/EA-83)" [Steffen.Vieser@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]  
**Cc:** "Dorer, Frank, Dr. (EAS/3)" [frank.dorer@volkswagen.de]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 5/17/2012 8:54:44 PM  
**Subject:** VW and EPA Meeting - MPI/FSI Fuel Injection System

When: Wednesday, May 30, 2012 8:00 AM-9:00 AM (GMT-05:00) Eastern Time (US & Canada).  
Where: Online Meeting

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

To all:

I have scheduled an online meeting to discuss the Volkswagen Group MPI/FSI Fuel Injection System. If this time is not acceptable or you cannot join this meeting through the internet connection provided, please let me know.

Jim and Linc:

If there are others at EPA that you wish to include, please let me know, and I will send out a revised invitation.

Best regards,

Len

-----  
Leonard W. Kata  
Manager, Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com<mailto:leonard.kata@vw.com>

**Ex. 6**

Join by Phone

**Ex. 6**

Find a local number<<https://dialin.vw.com>>

**Ex. 6**

# Ex. 6



**To:** Jim Snyder/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; inc Wehrly/AA/USEPA/US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Vieser, Steffen (I/EA-83)" [Steffen.Vieser@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]  
**Cc:** "Dorer, Frank, Dr. (EAS/3)" [frank.dorer@volkswagen.de]  
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\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

To all:

I have scheduled an online meeting to discuss the Volkswagen Group MPI/FSI Fuel Injection System. If this time is not acceptable or you cannot join this meeting through the internet connection provided, please let me know.

Jim:

I have added the names that you mentioned.

Best regards,

Len

-----  
Leonard W. Kata  
Manager, Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com<mailto:leonard.kata@vw.com>

.....  
Join online meeting<<https://join.vw.com/leonard.kata/76929278>>  
<https://join.vw.com/leonard.kata/76929278>

Join by Phone  
248-754-6400  
855-858-8080  
Find a local number<<https://dialin.vw.com>>

Conference ID: Non-Responsive

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meeting?<<http://r.office.microsoft.com/r/rlidOC10?clid=1033&p1=4&p2=1041&pc=oc&ver=4&subver=0&bld=7185&bldver=0>>  
[!OC([1033])!]  
.....

**To:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**Cc:** CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 5/17/2012 9:14:41 PM  
**Subject:** VW and EPA Meeting - MPI/FSI Fuel Injection System

Len, Please add the above people to your mtg invitation in case they are interested.

This is a web mtg with Germany on their upcoming multipoint/direct injection fuel system on May 30 at 8am.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**Cc:** CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
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Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 5/17/2012 9:16:29 PM  
**Subject:** RE: VW and EPA Meeting - MPI/FSI Fuel Injection System

Thanks, will do.

Len

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, May 17, 2012 5:15 PM  
To: Kata, Leonard (EEO)  
Cc: Joel Ball; Joel Dalton; Linc Wehrly; Stephen Healy; Chris Nevers; DavidA Wright; William Ott  
Subject: VW and EPA Meeting - MPI/FSI Fuel Injection System

Len, Please add the above people to your mtg invitation in case they are interested.

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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; oel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; tephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; hris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; avidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; illiam Ott/AA/USEPA/US@EPA[]  
**Cc:** "Dorer, Frank, Dr. (EAS/3)" [frank.dorer@volkswagen.de]; Vieser, Steffen (I/EA-83)" [Steffen.Vieser@AUDI.DE]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 5/17/2012 9:22:56 PM  
**Subject:** VW and EPA Meeting - MPI/FSI Fuel Injection System

When: Wednesday, May 30, 2012 8:00 AM-9:00 AM (GMT-05:00) Eastern Time (US & Canada).  
Where: Online Meeting

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

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E-Mail: leonard.kata@vw.com<mailto:leonard.kata@vw.com>

.....

# Non-Responsive

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meeting?<<http://r.office.microsoft.com/r/rlidOC10?clid=1033&p1=4&p2=1041&pc=oc&ver=4&subver=0&bld=7185&bldver=0>>  
[!OC([1033])!]  
.....

**To:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; oel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; tephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; hris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; avidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; illiam Ott/AA/USEPA/US@EPA[]  
**Cc:** "Dorer, Frank, Dr. (EAS/3)" [frank.dorer@volkswagen.de]; Vieser, Steffen (I/EA-83)" [Steffen.Vieser@AUDI.DE]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 5/17/2012 9:22:56 PM  
**Subject:** VW and EPA Meeting - MPI/FSI Fuel Injection System

When: Wednesday, May 30, 2012 8:00 AM-9:00 AM (GMT-05:00) Eastern Time (US & Canada).  
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Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com<mailto:leonard.kata@vw.com>

.....



# Ex. 6

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meeting?<<http://r.office.microsoft.com/r/rlidOC10?clid=1033&p1=4&p2=1041&pc=oc&ver=4&subver=0&bld=7185&bldver=0>>  
[!OC([1033])!]  
.....

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 5/17/2012 9:22:56 PM  
**Subject:** Cancelled: VW and EPA Meeting - MPI/FSI Fuel Injection System

When: Wednesday, May 30, 2012 8:00 AM-9:00 AM (GMT-05:00) Eastern Time (US & Canada).  
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.....  
**Ex. 6**  
.....

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**Ex. 6**  
.....



To:

Ex. 7

Ex. 7

Wehrly/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; oel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; tephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; hris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; avidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; illiam Ott/AA/USEPA/US@EPA[]

Cc:

Ex. 7

Ex. 7

From:

Ex. 7

Sent: Thur 5/17/2012 9:22:56 PM

Subject: Rescheduled: VW and EPA Meeting - MPI/FSI Fuel Injection System (May 30 08:00 AM EDT in Online Meeting)

When: Wednesday, May 30, 2012 8:00 AM-9:00 AM (GMT-05:00) Eastern Time (US & Canada).

Where: Online Meeting

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

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Ex. 7

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Ex. 7

Ex. 7

**Ex. 7**

Join by Phone

**Ex. 7**

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**Ex. 7**

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meeting

**Ex. 7**

58.616.02

**Ex. 7**

**To:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; oel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; tephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; hris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; aida Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA[]; illiam Ott/AA/USEPA/US@EPA[]  
**Cc:** "Dorer, Frank, Dr. (EAS/3)" [frank.dorer@volkswagen.de]; Vieser, Steffen (I/EA-83)" [Steffen.Vieser@AUDI.DE]; im Snyder/AA/USEPA/US@EPA[]  
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**Sent:** Thur 5/17/2012 9:22:56 PM  
**Subject:** VW and EPA Meeting - MPI/FSI Fuel Injection System

When: Wednesday, May 30, 2012 8:00 AM-9:00 AM (GMT-05:00) Eastern Time (US & Canada).  
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.....

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Join by Phone

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[!OC([1033])!]  
.....

**To:** David Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Fri 5/18/2012 11:28:17 AM  
**Subject:** RE: 2013 data in Verify as of May 11,2012 5PM is attached

Hi Dave;

So the first ten labels on your list will need to be entered again by the brand they represent if I understand you correctly. Please call me when you can so we might discuss the issue.

Thanks,

Richard 248 754 4213

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Thursday, May 17, 2012 4:20 PM  
To: Thomas, Richard (EEO)  
Subject: 2013 data in Verify as of May 11,2012 5PM is attached

Richard,

You are correct. According to the Data Elements, the mfr code field in the FE Label module (GL-2) is assigned by Verify---it is derived by Verify from the users' CDX account.

Attached is the VW/Audi data in Verify just prior to deploying Release 10.

(See attached file: VW Group 2013 FEGuide1-all rel dates-no-sales-5-11-2012.xlsx)



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Fri 5/18/2012 3:23:18 PM  
**Subject:** VW Group - Certificate Request DVWXV02.0U4S (2.0l TDI-SCR)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hi Jim,

I submitted a Certificate Request for the 2013 VW Passat 2.0L TDI-SCR, test group DVWXV02.0U4S. This is a carryover from 2012 with no changes.

Thanks,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office

3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

office (248) 754-4219

fax (248) 754-4207

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** "Verify Help Desk (**Ex. 6**)"  
**Cc:** David Good/AA/USEPA/US@EPA; Robert Peavyhouse/AA/USEPA/US@EPA[]; obert Peavyhouse/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Fri 5/18/2012 5:55:34 PM  
**Subject:** 2013 Label Inactive Request  
[winmail.dat](#)

**Ex. 6**

I have another issue with regard to 2013 fuel economy labels and have already discussed this with Dave Good at EPA. I have entered a number of 2013 labels signed on as Volkswagen because these models are contained within a Volkswagen test group or I original planned to enter everything for the Volkswagen Group signed on as Volkswagen. The models are actually Audi models. The basis for the QR code is VWX and therefore the Verify system generates a QR code based upon the VWX manufacturer code and cannot direct the customer to the proper label information when our system created the QR Code based upon an ADX manufacturer code.

It is not possible to change our system design to create the codes as a Volkswagen code so the solution was to enter these labels signed on as Audi and enter the model type fuel economy again thereby making the original labels inactive.

Would you please make the following labels inactive or delete them so I may enter them again as Audi:

VWX Index #: 009, 028, 029, and 034

Please delete or make the following indexes inactive for these Volkswagen indexes for these Bentley models:

VWX index #: 010, 011, 012, and 013

Please delete or make the following indexes inactive for these Audi indexes for these Bentley models:

ADX index#: 007 and 008

If you have any questions, please contact me directly.

Thanks,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)<<mailto:Richard.Thomas@VW.com>>

Hello **Ex. 6**

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3800 Hamlin Road  
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Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**Cc:** David Good/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA[]; obert Peavyhouse/AA/USEPA/US@EPA[]  
**From:** Ex. 6  
**Sent:** Fri 5/18/2012 6:11:18 PM  
**Subject:** Re: 2013 Label Inactive Request (HLP-2585)

Hello Mr. Thomas,

Verify help desk ticket HLP-2585 has been opened for this request.

**Ex. 6**

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Thomas, Richard  
(EEO)"  
<Richard.Thomas@vw.com> To  
cc  
05/18/2012 01:55 ""Good.David@epamail.epa.gov""  
PM <Good.David@epamail.epa.gov>,  
""Robert Peavyhouse  
(Peavyhouse.Robert@epamail.epa.gov)  
""  
<Peavyhouse.Robert@epamail.epa.gov>  
Subject  
2013 Label Inactive Request

Hello **Ex. 6**

I have another issue with regard to 2013 fuel economy labels and have already discussed this with Dave Good at EPA. I have entered a number of 2013 labels signed on as Volkswagen because these models are contained within a Volkswagen test group or I original planned to enter everything for the Volkswagen Group signed on as Volkswagen. The models are actually Audi models. The basis for the QR code is VWX and therefore the Verify system generates a QR code based upon the VWX manufacturer code and cannot direct the customer to the proper label information when our system created the QR Code based upon an ADX manufacturer code.

It is not possible to change our system design to create the codes as a Volkswagen code so the solution was to enter these labels signed on as Audi and enter the model type fuel economy again thereby making the original labels inactive.

Would you please make the following labels inactive or delete them so I may enter them again as Audi:

VWX Index #: 009, 028, 029, and 034

Please delete or make the following indexes inactive for these Volkswagen indexes for these Bentley models:

VWX index #: 010, 011, 012, and 013

Please delete or make the following indexes inactive for these Audi indexes for these Bentley models:

ADX index#: 007 and 008

If you have any questions, please contact me directly.

Thanks,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com<mailto:Richard.Thomas@VW.com>

**To:** David Good/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA[]; obert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** Richard.Thomas@vw.com[]  
**From:** Ex. 6  
**Sent:** Fri 5/18/2012 7:52:08 PM  
**Subject:** Re: 2013 Label Inactive Request ( HLP-2585)

Hello Mr. Good and Mr. Peavyhouse,

Will you please provide specific direction for us to make the indexes indicated in Mr. Thomas's attached email inactive in the database? Thank you.

**Ex. 6**

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Thomas, Richard  
(EEO)"  
<Richard.Thomas@vw.com> To Verify Help Desk@CSC  
cc  
05/18/2012 01:55 PM ""Good.David@epamail.epa.gov""  
<Good.David@epamail.epa.gov>,"  
"Robert Peavyhouse  
(Peavyhouse.Robert@epamail.epa.gov)"  
""  
<Peavyhouse.Robert@epamail.epa.gov>  
Subject  
2013 Label Inactive Request

Hello **Ex. 6**

I have another issue with regard to 2013 fuel economy labels and have already discussed this with Dave Good at EPA. I have entered a number of 2013 labels signed on as Volkswagen because these models are contained within a Volkswagen test group or I original planned to enter everything for the Volkswagen Group signed on as Volkswagen. The models are actually Audi models. The basis for the QR code is VWX and therefore the Verify system generates a QR code based upon the VWX manufacturer code and cannot direct the customer to the proper label information when our system created the QR Code based upon an ADX manufacturer code.

It is not possible to change our system design to create the codes as a Volkswagen code so the solution was to enter these labels signed on as Audi and enter the model type fuel economy again thereby making the original labels inactive.

Would you please make the following labels inactive or delete them so I may enter them again as Audi:

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Please delete or make the following indexes inactive for these Volkswagen indexes for these Bentley models:

VWX index #: 010, 011, 012, and 013

Please delete or make the following indexes inactive for these Audi indexes for these Bentley models:

ADX index#: 007 and 008

If you have any questions, please contact me directly.

Thanks,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com<mailto:Richard.Thomas@VW.com>



**To:** David Good/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]

**Cc:** Linc Wehrly/AA/USEPA/US@EPA; Ex. 7

**From:** Ex. 7

**Sent:** Mon 5/21/2012 1:02:41 PM

**Subject:** Testing Strategy Approval Request - Audi Start/Stop Systems  
[winmail.dat](#)

Hello Dave;

After our visit with the demonstration 4.0L V8 Audi A8 on May 8th and equipped with cylinder deactivation and start/stop strategy, we reviewed our testing strategy and have the following request.

The 3.0L V6 engine equipped Audi A8 emission data vehicle tested on May 2nd and May 8th at the EPA facility, was tested in two configurations. That is: complete five cycle tests with start/stop active and a complete second set of tests with start/stop system inactive at our facility in Ingolstadt. EPA confirmed the city tests in both configurations, start/stop active and inactive. Under the start/stop enable conditions you saw during the presentation, it is clear that the engine does not stop during three of the 5-cycle tests. There is no engine shut down in Highway, SC03 and Cold CO test cycles and only marginal engine stop in the US06 test cycle. The current start/stop strategy would yield on minor fuel economy improvement in the FTP and US06 cycle and therefore we would prefer to test only the FTP and US06 harmonically average the two sets of test configurations together at the 50/50 rate.

The high cost testing burden at our facility would be lessened and testing capacity could improve. Until which time there are some operational start/stop system strategy changes, we would propose to test only the FTP and US06 with start/stop active and inactive and average these tests at the 50/50 rate.

If you have any questions, please contact me directly.

Best regards,

Ex. 7

**To:** David Good/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]  
**Cc:** Linc Wehrly/AA/USEPA/US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Mon 5/21/2012 1:02:41 PM  
**Subject:** Testing Strategy Approval Request - Audi Start/Stop Systems  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

Hello Dave;

After our visit with the demonstration 4.0L V8 Audi A8 on May 8th and equipped with cylinder deactivation and start/stop strategy, we reviewed our testing strategy and have the following request.

The 3.0L V6 engine equipped Audi A8 emission data vehicle tested on May 2nd and May 8th at the EPA facility, was tested in two configurations. That is: complete five cycle tests with start/stop active and a complete second set of tests with start/stop system inactive at our facility in Ingolstadt . EPA confirmed the city tests in both configurations, start/stop active and inactive. Under the start/stop enable conditions you saw during the presentation, it is clear that the engine does not stop during three of the 5-cycle tests. There is no engine shut down in Highway, SC03 and Cold CO test cycles and only marginal engine stop in the US06 test cycle. The current start/stop strategy would yield on minor fuel economy improvement in the FTP and US06 cycle and therefore we would prefer to test only the FTP and US06 harmonically average the two sets of test configurations together at the 50/50 rate.

The high cost testing burden at our facility would be lessened and testing capacity could improve. Until which time there are some operational start/stop system strategy changes, we would propose to test only the FTP and US06 with start/stop active and inactive and average these tests at the 50/50 rate.

If you have any questions, please contact me directly.

Best regards,

Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)

Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

**To:** Verify Help Desk [verifyhelp@csc.com]; im Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 5/21/2012 7:08:40 PM  
**Subject:** VW Group - Error on Request for Certificate

Hello,

I received the below error when submitting a request for certificate for Lamborghini Test Group DNLXV06.5L83.

Note, we confirmed that we submitted information related to this test group both in our preliminary GHG report and in the Certification preview meeting.

Also, the application document was received into VERIFY with email confirmation prior to this error.

Please advise.

Regards

Mike

Transaction: \_79e19103-1dbf-445c-9a41-0271990accc6

#### Transaction Status Details

Transaction Status Identifier : REJECTED

Transaction Message Text : LD-CERT-CR-BR027 - If GHG Pre-Model Year Report Indicator (CR-22) is 'Y' (Yes), then an LD-GHG Pre-Model Year Report must have been submitted for this Model Year (CR-3).

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 5/22/2012 1:13:30 PM  
**Subject:** FW: VW Group - Error on Request for Certificate (HLP-2589)

Hello Jim,

We have submitted the application for Lamborghini but are having strange issues with VERIFY related to submitting a request for certificate.

In the meantime if you can let me know if you have any questions about this, please let me know.

This is a carryover test group with same Exhaust and Evaporative tests, but the exhaust uses the new EPA assigned additive DF's. Also, we are adding two stop/start configurations for MY 2013 (in addition to the two existing non-stop/start configurations).

Thanks,  
Mike

-----Original Message-----

From: Giles, Michael (EEO)  
Sent: Tuesday, May 22, 2012 8:40 AM  
To: 'Verify Help Desk'  
Cc: Harris, Dale; Rodgers, William  
Subject: RE: VW Group - Error on Request for Certificate (HLP-2589)

Hello [Ex. 6]

The GHG report was already submitted through Mfr. VWX. To confirm this, see attached error message when we tried to re-submit the file through NLX.

Why doesn't the system accept our "Y" answer that the GHG report was submitted, as it did in the past? It appears that this field is broken or has become non-functional, whereas it would be the best solution for us with multiple Mfr codes.

Can you help point us in the right direction here as we need to understand the process changes.

Thanks,  
Mike

#####

Submission rejected for your file upload CBI\_DVWXV\_COMMON\_CR1A\_CAR\_R03.pdf - Message  
From: Verify Administrator  
Subject: Submission rejected for your file upload CBI\_DVWXV\_COMMON\_CR1A\_CAR\_R03.pdf  
Date: Tue 5/22/2012 8:06 AM

Your recent submission for the file upload CBI\_DVWXV\_COMMON\_CR1A\_CAR\_R03.pdf has been received by EPA. The following errors in your submission prevented it from being accepted by EPA.  
Validation Error(s):

- DOC-BR14 - The document file name 'CBI\_DVWXV\_COMMON\_CR1A\_CAR\_R03.pdf' already exists in the Verify system.

The following document identifier has been assigned to this request:

\_b101c00d-c6ea-43c9-a776-bbd8b441f6aa

---

Document Name: CBI\_DVWXV\_COMMON\_CR1A\_CAR\_R03.pdf Transaction Identifier: \_b101c00d-c6ea-43c9-a776-bbd8b441f6aa

[Click here to view the status history.](#)

Thank you for submitting your request to Verify via CDX.

-----Original Message-----

From: [REDACTED] Ex. 6 ] On Behalf Of Verify Help Desk

Sent: Monday, May 21, 2012 5:51 PM

To: Giles, Michael (EEO)

Subject: Re: VW Group - Error on Request for Certificate (HLP-2589)

Hello Mr. Giles,

Verify help desk ticket HLP-2589 was opened for your inquiry.

I've verified that two documents were uploaded for NLX today; however, the Compliance Document Type associated with both documents is 'APPLICATION FOR CERTIFICATION.'

I do not see a document in the system for NLX associated with Compliance Document Type: LD-GHG Pre-model Year Report.

Please upload this report using this Compliance Document Type (see highlighted blue selection in screen shot). After you have uploaded this report and associated it with this document type please try your certificate request submission again and let me know if it is accepted.

(Embedded image moved to file: pic06422.gif)

[REDACTED] Ex. 6

Verify Help Desk

Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

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"Giles, Michael  
(EEO)"  
<michael.giles@vw.com> To  
Verify Help Desk@CSC, "Jim Snyder  
(Snyder.Jim@epamail.epa.gov)"  
05/21/2012 03:08 <Snyder.Jim@epamail.epa.gov>  
PM cc  
"Rodgers, William (EEO)"  
<William.Rodgers@vw.com>  
Subject  
VW Group - Error on Request for  
Certificate

Hello,

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Note, we confirmed that we submitted information related to this test group both in our preliminary GHG report  
and in the Certification preview meeting.

Also, the application document was received into VERIFY with email confirmation prior to this error.

Please advise.

Regards  
Mike

Transaction: \_79e19103-1dbf-445c-9a41-0271990accc6

#### Transaction Status Details

Transaction Status Identifier : REJECTED Transaction Message Text : LD-CERT-CR-BR027 - If GHG Pre-Model Year  
Report Indicator (CR-22) is 'Y' (Yes), then an LD-GHG Pre-Model Year Report must have been submitted for this  
Model Year (CR-3).

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.



3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 5/22/2012 7:05:35 PM  
**Subject:** RE: VW Group - Error on Request for Certificate (HLP-2589)

Hello Jim,

It looks like I did manage to get the certificate request through. Can you confirm it made it to your side?

Thanks,  
Mike

-----Original Message-----

From: Giles, Michael (EEO)  
Sent: Tuesday, May 22, 2012 9:14 AM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov)  
Subject: FW: VW Group - Error on Request for Certificate (HLP-2589)

Hello Jim,

We have submitted the application for Lamborghini but are having strange issues with VERIFY related to submitting a request for certificate.

In the meantime if you can let me know if you have any questions about this, please let me know.

This is a carryover test group with same Exhaust and Evaporative tests, but the exhaust uses the new EPA assigned additive DF's. Also, we are adding two stop/start configurations for MY 2013 (in addition to the two existing non-stop/start configurations).

Thanks,  
Mike

-----Original Message-----

From: Giles, Michael (EEO)  
Sent: Tuesday, May 22, 2012 8:40 AM  
To: 'Verify Help Desk'  
Cc: Harris, Dale; Rodgers, William  
Subject: RE: VW Group - Error on Request for Certificate (HLP-2589)

Hello Vincent,

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Why doesn't the system accept our "Y" answer that the GHG report was submitted, as it did in the past? It appears that this field is broken or has become non-functional, whereas it would be the best solution for us with multiple Mfr codes.

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Thanks,

Mike

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Submission rejected for your file upload CBI\_DVWXV\_COMMON\_CR1A\_CAR\_R03.pdf - Message

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Date: Tue 5/22/2012 8:06 AM

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The following errors in your submission prevented it from being accepted by EPA.

Validation Error(s):

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The following document identifier has been assigned to this request:

\_b101c00d-c6ea-43c9-a776-bbd8b441f6aa

---

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[Click here to view the status history.](#)

Thank you for submitting your request to Verify via CDX.

-----Original Message-----

From: Vincent E Coleman [mailto:vcoleman2@csc.com] On Behalf Of Verify Help Desk

Sent: Monday, May 21, 2012 5:51 PM

To: Giles, Michael (EEO)

Subject: Re: VW Group - Error on Request for Certificate (HLP-2589)

Hello Mr. Giles,

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(Embedded image moved to file: pic06422.gif)

Vincent

Verify Help Desk

Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

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"Giles, Michael  
(EEO)"  
<michael.giles@vw.com> To  
Verify Help Desk@CSC, "Jim Snyder  
(Snyder.Jim@epamail.epa.gov)"  
05/21/2012 03:08 <Snyder.Jim@epamail.epa.gov>  
PM cc  
"Rodgers, William (EEO)"  
<William.Rodgers@vw.com>  
Subject  
VW Group - Error on Request for  
Certificate

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Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian (EEO)"  
**Sent:** Thur 5/24/2012 12:53:54 PM  
**Subject:** RE: In-use vehicles scheduled for next week  
[parameters form\\_R136RXX-0088.xlsx](#)  
[parameters form\\_R136RXX-0014.xlsx](#)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
[Sebastian.Berenz@vw.com](mailto:Sebastian.Berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>  
<mailto:Sohacki.Lynn@epamail.epa.gov>

Hello Lynn,

We inspected the two vehicles yesterday and I added the missing weight to the paperwork and signed it together with Vince.

Attached you will find my update. All three vehicles have the same parameters.

Let me know if you need anything.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Wednesday, May 23, 2012 9:28 AM  
To: Berenz, Sebastian (EEO)  
Subject: Fw: In-use vehicles scheduled for next week

Hi, Sebastian.

The file for R136RXX-0088 does not seem to have an equivalent test weight. Please forward that to me when you can. Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

----- Forwarded by Lynn Sohacki/AA/USEPA/US on 05/23/2012 09:26 AM -----

From: "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 05/17/2012 09:07 AM  
Subject: RE: In-use vehicles scheduled for next week

Hello Lynn,

Attached you will find the two parameter sheets for the vehicles we will get next week.  
They are all identical due to the parameters.

Whenever I get a call from URS, we will come down to Ann Arbor and check the Jetta's in.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Wednesday, May 16, 2012 3:46 PM  
To: Berenz, Sebastian (EEO)  
Subject: In-use vehicles scheduled for next week

Hi, Sebastian.

Listed below is the information for the vehicles that we have scheduled for next week.

R136RXX-0088 (2010 VW/Jetta) - VIN# Ex. 6 0700 Veh. Pick up on 5/22/12 (Tuesday)

R136RXX-0014 (2010 VW/Jetta) - VIN# Ex. 6 0800 Veh. Pick up on 5/23/12 (Wednesday)

Please use the form to send testing information to me for these vehicles before pick-up. Return the attached form in excel format so that the values may be automatically transferred to our testing network.

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

- \*disabling traction control, stability control and any load leveling the vehicle may have\*
- preferred method for loading the canister
- preferred fuel drain method
- any special starting procedures
- ABS disabling instructions
- for flex-fuel vehicles, the fuel switch procedure

I will pass this information along to our contractor, URS, and lab personnel. Paper copies or e-mails sent directly to URS or lab personnel may result in incorrect information being distributed.

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax



(See attached file: parameters form.xlsx)(See attached file: parameters form\_R136RXX-0014.xlsx)(See attached file: parameters form\_R136RXX-0088.xlsx)



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number:

Equivalent Test Weight:  Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:  Gallons 40% Fill  Gallons

Drive Axle:  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

A  Lb-force

B  Lb-force\*mpH

C  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EG&G Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form 1000-01 for In-Use Testing

EPA Vehicle Control Number:

Equivalent Test Weight:  Pounds (Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:  Gallons 40% Fill  Gallons

Drive Axle:  (Select number from list below )

- 1 Rear Drive Str Left
- 2 Rear Drive Str Right
- 3 Front Drive Str Left
- 4 Front Drive Str Right
- 5 Four Wheel Drive Str Left
- 6 Four Wheel Drive Str Right
- 7 Rear Drive Off Road
- 9 Other
- 10 4-Wheel Drive
- 11 2-Wheel Drive, Front
- 12 2-Wheel Drive, Rear
- 13 Part-time 4-Wheel Drive
- 15 All Wheel Drive

Mfr. Shift Schedule (if required)  FTP  HWY  US06

### Vehicle Target Road-Load Coefficients

A  Lb-force

B  Lb-force\*mpH

C  Lb-force\*mpH<sup>2</sup>

### Canister Working Capacity:

Grams (Integer Only: Canister Working Capacity)

Number of Canisters (Integer Only: Number of Canisters)

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

### Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

#### Canister Loading Process:

#### Fuel Draining Process:

#### ABS Disabling Process:

#### Fuel Switch Process (Flex Fuel only):

#### Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative:

Date:

EG&G Representative:

Date:

EPA Representative:

Date:

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 5/24/2012 2:42:49 PM  
**Subject:** VW Group Certification Requests

Hi Jim,

I have uploaded two Certification Requests and the associated Applications today for the following carryover test groups.

DVWXT03.6U76 – VW Touareg VR6

DVWXV06.3UA8 – Audi A8L W12 (VW test group)

Regards,

Bill Rodgers

**To:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Dorer, Frank, Dr. (EAES/3)" [frank.dorer@volkswagen.de]; Vieser, Steffen (I/EA-83)" [Steffen.Vieser@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; inc Wehrly/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA; Joel Ball/AA/USEPA/US@EPA; Joel Dalton/AA/USEPA/US@EPA; Stephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; [Redacted] im Snyder/AA/USEPA/US@EPA; Joel Ball/AA/USEPA/US@EPA; Joel Dalton/AA/USEPA/US@EPA; Stephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; "Schlueter, Hannah (EXTERN: [Redacted] Redacted oel Ball/AA/USEPA/US@EPA; Joel Dalton/AA/USEPA/US@EPA; Stephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; " [Redacted] Redacted oel Dalton/AA/USEPA/US@EPA; Stephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; " [Redacted] Redacted tephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; " [Redacted] Redacted hris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; " [Redacted] Redacted aida Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; " [Redacted] Redacted illiam Ott/AA/USEPA/US@EPA; " [Redacted] Redacted Redacted Redacted Stendel, Detlef (EASZ/1)" [detlef.stendel@volkswagen.de]

**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]

**From:** "Kata, Leonard (EEO)"

**Sent:** Tue 5/29/2012 2:02:52 PM

**Subject:** VW and EPA Meeting - MPI/FSI Fuel Injection System  
[03\\_mpi-fsi-injection\\_system\\_FINAL.pptx](#)

To all:

Tomorrow, May 30, 2012 at 0800 Detroit Time, we have scheduled a VW/EPA web conference to discuss the MPI/FSI fuel injection system.

I have attached a back-up copy of the slides that will be presented.

Please refer to the meeting invitation for connection details.

Best regards,

Len

---

Leonard W. Kata

Manager, Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Tue 5/29/2012 2:29:13 PM  
**Subject:** Audi Test Group - Lamborghini Gallardo Models  
[winmail.dat](#)

Hello Bob;

I need your input in order to label 2013 Lamborghini Gallardo models that are contained in a 2013 Audi Test group. I attempted to enter index # 030 signed on as NLX (Lamborghini) and received the following error messages from Verify;

Transaction Status Details

Transaction Status Identifier : REJECTED

Transaction Message Text : LD-FE-GL-BR202 - If the Manufacturer Code of the owner of the Representative Test Group (GL-13.5) is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the Test Group. (Test Group = DADXV05.2LR8)

Transaction Message Text : LD-FE-GL-BR003 - The Submitter's Manufacturer Code (in Submission Author Details) must match the Carline Manufacturer Code (GL-10).

Transaction Message Text : LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label. (Subconfiguration Test Group = DADXV05.2LR8)

There is a work around for BR154 that I don't want to use now, because I can wait till after the next release 10 deployment on June 1.

Previously we removed a couple of error messages by allowing Audi to use Lamborghini as an alternate manufacture by test group and carline. We have only two carlines 406 Gallardo Coupe and 426 Gallardo Spyder created as Audi division 3 in test group DADXV05.2LR8. I know you mentioned to me that we should not create more than one carline for a model name.

In an attempt to remove BR202 and BR003 we tried to sign on as Lamborghini and allow Audi as an alternative manufacture but got error processing messages: BR8, BR11, and BR10.

If you can tell me what the latest thinking is regarding the Volkswagen Group situation and manufacture codes, carline and division numbers, I would appreciate it. Perhaps I should enter this as an Audi label and error BR003 will go away. If you feel that the Verify help people are up to speed and should handle this problem, please let me know and I will direct this to them.

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com<mailto:Richard.Thomas@VW.com>





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*Richard E. Thomas*  
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3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** David Good/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Tue 5/29/2012 2:29:13 PM  
**Subject:** Audi Test Group - Lamborghini Gallardo Models  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

Hello Bob;

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Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

**To:** Joel Ball/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Wed 5/30/2012 12:11:09 PM  
**Subject:** FW: VW and EPA Meeting - MPI/FSI Fuel Injection System  
03\_mpi-fsi-injection\_system\_FINAL.pptx

From: Kata, Leonard (EEO)  
Sent: Tuesday, May 29, 2012 10:03 AM  
To: Peter, Juergen (EASZ/1); Rech, Lothar (I/EA-523); Dorer, Frank, Dr. (EAES/3); Vieser, Steffen (I/EA-83); Schmidt, Oliver (EEO); Wehrly.Linc@epamail.epa.gov; 'Jim Snyder'; Ball.Joel@epamail.epa.gov; 'Dalton.Joel@epamail.epa.gov'; Healy.Stephen@epamail.epa.gov; Nevers.Chris@epamail.epa.gov; 'Wright.DavidA@epamail.epa.gov'; 'Ott.William@epamail.epa.gov'; \$Redacted;  
Stendel, Detlef (EASZ/1)  
Cc: Rodgers, William (EEO); Giles, Michael (EEO)  
Subject: VW and EPA Meeting - MPI/FSI Fuel Injection System

To all:

Tomorrow, May 30, 2012 at 0800 Detroit Time, we have scheduled a VW/EPA web conference to discuss the MPI/FSI fuel injection system.

I have attached a back-up copy of the slides that will be presented.

Please refer to the meeting invitation for connection details.

Best regards,

Len

---

Leonard W. Kata

Manager, Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Dorer, Frank, Dr. (EAES/3)" [frank.dorer@volkswagen.de]; Wieser, Steffen (I/EA-83)" [Steffen.Wieser@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; inc Wehrly/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA; Joel Ball/AA/USEPA/US@EPA; Joel Dalton/AA/USEPA/US@EPA; Stephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; "Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; im Snyder/AA/USEPA/US@EPA; Joel Ball/AA/USEPA/US@EPA; Joel Dalton/AA/USEPA/US@EPA; Stephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; "Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; oel Ball/AA/USEPA/US@EPA; Joel Dalton/AA/USEPA/US@EPA; Stephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; "Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; oel Dalton/AA/USEPA/US@EPA; Stephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; "Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; tephen Healy/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; "Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; hris Nevers/AA/USEPA/US@EPA; David A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; "Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; avid A Wright/AA/USEPA/US@EPA; William Ott/AA/USEPA/US@EPA; "Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; illiam Ott/AA/USEPA/US@EPA; "Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; Stendel, Detlef (EASZ/1)" [detlef.stendel@volkswagen.de]

**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]

**From:** "Kata, Leonard (EEO)"

**Sent:** Wed 5/30/2012 12:39:02 PM

**Subject:** RE: VW and EPA Meeting - MPI/FSI Fuel Injection System

Hello all:

Unfortunately, not all participants were able to join the originally scheduled conference call and it was rescheduled for 0900 Detroit time today. I have a meeting conflict at 0900 that I thought I could change, but this is not possible. Therefore, we need to reschedule this conference call/web conference for later today. 1000 or later would be preferable.

Please let me know if this is possible.

Best regards,

Len

---

Leonard W. Kata

Manager, Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

From: Kata, Leonard (EEO)

Sent: Wednesday, May 30, 2012 8:16 AM

To: Kata, Leonard (EEO); Peter, Juergen (EASZ/1); Rech, Lothar (I/EA-523); Dorer, Frank, Dr. (EAES/3); Vieser, Steffen (I/EA-83); Schmidt, Oliver (EEO); 'Wehrly.Linc@epamail.epa.gov'; 'Jim Snyder'; 'Ball.Joel@epamail.epa.gov'; 'Dalton.Joel@epamail.epa.gov'; 'Healy.Stephen@epamail.epa.gov'; 'Nevers.Chris@epamail.epa.gov'; 'Wright.DavidA@epamail.epa.gov'; 'Ott.William@epamail.epa.gov'; Schlueter, Hannah (EXTERN: IAV); Stendel, Detlef (EASZ/1)

Cc: Rodgers, William (EEO); Giles, Michael (EEO)

Subject: RE: VW and EPA Meeting - MPI/FSI Fuel Injection System

From: Kata, Leonard (EEO)

Sent: Tuesday, May 29, 2012 10:03 AM

To: Peter, Juergen (EASZ/1); Rech, Lothar (I/EA-523); Dorer, Frank, Dr. (EAES/3); Vieser, Steffen (I/EA-83); Schmidt, Oliver (EEO); Wehrly.Linc@epamail.epa.gov; 'Jim Snyder'; Ball.Joel@epamail.epa.gov; 'Dalton.Joel@epamail.epa.gov'; Healy.Stephen@epamail.epa.gov; Nevers.Chris@epamail.epa.gov; 'Wright.DavidA@epamail.epa.gov'; 'Ott.William@epamail.epa.gov'; Schlueter, Hannah (EXTERN: IAV); Stendel, Detlef (EASZ/1)



Cc: Rodgers, William (EEO); Giles, Michael (EEO)  
Subject: VW and EPA Meeting - MPI/FSI Fuel Injection System

To all:

Tomorrow, May 30, 2012 at 0800 Detroit Time, we have scheduled a VW/EPA web conference to discuss the MPI/FSI fuel injection system.

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Best regards,

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E-Mail: leonard.kata@vw.com

**To:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Dorer, Frank, Dr. (EAES/3)" [frank.dorer@volkswagen.de]; Wieser, Steffen (I/EA-83)" [Steffen.Wieser@AUDI.DE]; inc Wehrly/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"[REDACTED]"(EXTERN: IAV)" [extern.[REDACTED]@volkswagen.de]; im Snyder/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"[REDACTED]"(EXTERN: IAV)" [extern.[REDACTED]@volkswagen.de]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"[REDACTED]"(EXTERN: IAV)" [extern.[REDACTED]@volkswagen.de]; oel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"[REDACTED]"(EXTERN: IAV)" [extern.[REDACTED]@volkswagen.de]; tephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"[REDACTED]"(EXTERN: IAV)" [extern.[REDACTED]@volkswagen.de]; hris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"[REDACTED]"(EXTERN: IAV)" [extern.[REDACTED]@volkswagen.de]; avidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"[REDACTED]"(EXTERN: IAV)" [extern.[REDACTED]@volkswagen.de]; illiam Ott/AA/USEPA/US@EPA;"[REDACTED]"(EXTERN: IAV)" [extern.[REDACTED]@volkswagen.de]; [REDACTED]"(EXTERN: IAV)" [extern.[REDACTED]@volkswagen.de]; Stendel, Detlef (EASZ/1)" [detlef.stendel@volkswagen.de]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Wed 5/30/2012 12:55:33 PM  
**Subject:** Invitation: VW/EPA - MPI-FSI Fuel System (May 30 10:00 AM EDT in Web conference)

When: Wednesday, May 30, 2012 10:00 AM-11:00 AM (GMT-05:00) Eastern Time (US & Canada).  
Where: Web conference

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

**Non-Responsive**

Forgot your dial-in PIN?<<https://dialin.vw.com>> | First online meeting?<<http://r.office.microsoft.com/r/rlidOC10?clid=1033&p1=4&p2=1041&pc=oc&ver=4&subver=0&bld=7185&bldver=0>>  
[!OC([1033])!]  
.....

To all:

Sorry about the confusion. We have rescheduled the conference call for 1000 Detroit time.

The slides have been distributed a couple of time. Please let me know if you need these.

Web conference details are shown above.

Best regards,

Len

---

Leonard W. Kata  
Manager, Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: [leonard.kata@vw.com](mailto:leonard.kata@vw.com)<<mailto:leonard.kata@vw.com>>

**To:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Dorer, Frank, Dr. (EAES/3)" [frank.dorer@volkswagen.de]; Wieser, Steffen (I/EA-83)" [Steffen.Wieser@AUDI.DE]; inc Wehrly/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; im Snyder/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; tephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; hris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; avidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; illiam Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; Stendel, Detlef (EASZ/1)" [detlef.stendel@volkswagen.de]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Wed 5/30/2012 12:55:33 PM  
**Subject:** VW/EPA - MPI-FSI Fuel System

When: Wednesday, May 30, 2012 10:00 AM-11:00 AM (GMT-05:00) Eastern Time (US & Canada).

Where: Web conference

Note: The GMT offset above does not reflect daylight saving time adjustments.

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**Ex. 6**

Join by Phone

**Ex. 6**

**Ex. 6**

**Ex. 6**

First online

# Ex. 6

To all:

Sorry about the confusion. We have rescheduled the conference call for 1000 Detroit time.

The slides have been distributed a couple of time. Please let me know if you need these.

Web conference details are shown above.

Best regards,

Len

---

Leonard W. Kata  
Manager, Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: [leonard.kata@vw.com](mailto:leonard.kata@vw.com)<mailto:leonard.kata@vw.com>

**To:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Dorer, Frank, Dr. (EAES/3)" [frank.dorer@volkswagen.de]; Vieser, Steffen (I/EA-83)" [Steffen.Vieser@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; im Snyder/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; oel Dalton/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; tephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; hris Nevers/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; avidA Wright/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; illiam Ott/AA/USEPA/US@EPA;"Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; Schlueter, Hannah (EXTERN: IAV)" [extern.hannah.helena.schlueter@volkswagen.de]; Stendel, Dettlef (EASZ/1)" [dettlef.stendel@volkswagen.de]

**From:** "Kata, Leonard (EEO)"

**Sent:** Wed 5/30/2012 1:00:26 PM

**Subject:** VW/EPA Web Conference

To all:

This is the "belt and suspenders" approach. Please note that the VW/EPA web conference for MPI-FSI Fuel System is now on for 1000 Detroit time today. Details should appear on your calendars.

Best regards,

Len

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Leonard W. Kata

Manager, Emission Regulations and Certification

Engineering and Environmental Office


Volkswagen Group of America, Inc.

Phone: (248) 754-4204

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E-Mail: leonard.kata@vw.com

C150

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results							
Test Number: 2012-0208-005			Vehicle ID: R136RXX-0020				
	Test Date: 5/24/2012		MFR Name: VOLKSWAGEN				
	Key Start: 14:15:34		MFR Codes: 590 VWX				
	Fuel Container ID: F00023		Config #: 00				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO				
	Test Procedure: 90 US06 (us06warmup_us06)		Shift Schedule: A09980041				
	Calculation Method: Gasoline		Beginning Odometer: 015145.0 MI				
Pretest Remarks:			Drive Schedule: us06_us06				
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	5.635	57.220	0.308	1.027	2.183		
Ambient	4.641	0.522	0.000	0.043	2.013		
Net Concentration	1.352	56.739	0.308	0.987	0.326	0.995	
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.015	1.261	0.010	344.9	0.004	0.011	25.724
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>	<u>Dyno Settings</u>					
Phase 1	25.66	Dyno #: D002					
		Inertia: 3625					
		EPA Set Co A: 6.7800002					
		EPA Set Co B: 0.27779999					
		EPA Set Co C: 0.01644					
		Emiss-Bench: D002					
v120518 - d002 EPAVDAEm120524135105 Page 1 of 2 Print Time 29-May-2012 14:55							



**NVFEL Laboratory Test Data**  
**Final Laboratory Test Results**

**CVS**

Test Number: 2012-0208-005

Vehicle ID: R136RXX-0020

**Results**



	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	
Phase 1	0.119	10.101	0.082	2762.0	0.033	0.088	1.098

**Test Conditions**


	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	28.90			
Avg Cell Temp (degF)	75.17			
Dew Point (degF)	49.42			
Specific Humidity (grains/lbm)	54.26			
NOx Corr Factor	0.9112			
CO2 Dilution Factor	12.963			
CFV Vmix (scf @68F)	5399.58			

CVS Flow Rate Avg (scfm) 538.34

Fan Placement: US06 Only - One Large Fan - Up - Front

Phase Time (secs)	601.80
Distance (miles)	8.007
Bag Analysis Time (secs)	75.0

45D

NVFEL Laboratory Test Data								CVS
Final Laboratory Test Results								
Test Number: 2012-0208-004				Vehicle ID: R136RXX-0020				
	Test Date: 5/24/2012		MFR Name: VOLKSWAGEN					
	Key Start: 13:30:36		MFR Codes: 590		VWX			
	Fuel Container ID: F00023		Config #: 00					
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO					
	Test Procedure: 03 HWFET (hwfetprep_hwfet)		Shift Schedule: A09980011					
	Calculation Method: Gasoline		Beginning Odometer: 015125.0 MI					
Pretest Remarks:				Drive Schedule: hwfet_hwfet				
<b>Bag Data</b>								
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>		
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)		
Sample	3.034	17.586	0.497	1.529	1.908			
Ambient	3.038	0.473	0.017	0.044	1.982			
Net Concentration	0.343	17.168	0.482	1.490	0.152	0.176		
Remarks:								
<b>Phase 2</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Phase 3</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Phase 4</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Results</b>								
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>	
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)	
Phase 1	0.002	0.169	0.007	230.1	0.001	0.001	38.741	
<b>Fuel Economy</b>								
	<u>Gasoline MPG</u>	<u>Dyno Settings</u>			<u>Dyno #:</u> D002			
Phase 1	38.65				Inertia: 3625			
					EPA Set Co A: 6.7800002			
					EPA Set Co B: 0.27779999			
					EPA Set Co C: 0.01644			
					Emiss-Bench: D002			
v120518 - d002 EPAVDAEm120524124959 Page 1 of 2 Print Time 29-May-2012 14:54								

**NVFEL Laboratory Test Data**  
**Final Laboratory Test Results**

**CVS**

Test Number: 2012-0208-004

Vehicle ID: R136RXX-0020

**Results**



	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	
Phase 1	0.017	1.726	0.072	2353.9	0.009	0.009	1.098

**Test Conditions**

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	28.91			
Avg Cell Temp (degF)	75.10			
Dew Point (degF)	49.32			
Specific Humidity (grains/lbm)	54.04			
NOx Corr Factor	0.9103			
CO2 Dilution Factor	8.751			
CFV Vmix (scf @68F)	3049.33			
CVS Flow Rate Avg (scfm)	239.13			
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	765.10			
Distance (miles)	10.229			
Bag Analysis Time (secs)	74.9			

C15D

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0208-002

Vehicle ID: R136RXX-0020

### Test Information

Test Date: 5/24/2012

MFR Name: VOLKSWAGEN

Key Start / Hot Soak: 12:01:13 / 09:36

MFR Codes: 590

VWX

Fuel Container ID: F00023

Config #: 00

Fuel Type: 61 Tier 2 Cert Test Fuel

Transmission: AUTO

Test Procedure: 21 Fed Fuel 2-day Exhaust (CAN LOAD)(ftp

Shift Schedule: A09980005

Calculation Method: Gasoline

Beginning Odometer: 015114.0 MI

Pretest Remarks:

Drive Schedule: ftp3bag

Soak Period: 28.1 hours



### Bag Data

#### Phase 1

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Sample	6.031	49.451	0.285	0.849	2.360	
Ambient	3.626	0.713	0.008	0.043	1.989	
Net Concentration	2.636	48.784	0.277	0.808	0.498	2.089

Remarks:

#### Phase 2

Sample	3.341	3.370	0.004	0.545	1.933	
Ambient	3.431	0.656	0.015	0.043	1.988	
Net Concentration	0.050	2.741	-0.011	0.504	0.026	0.022

Remarks:

#### Phase 3

Sample	3.252	8.192	0.079	0.729	1.985	
Ambient	3.129	0.605	0.002	0.042	1.932	
Net Concentration	0.294	7.621	0.077	0.689	0.158	0.121

Remarks:

#### Phase 4

Sample	
Ambient	
Net Concentration	

Remarks:

### Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC (gpm)	Vol MPG (mpg)
Phase 1	0.039	1.453	0.012	378.1	0.009	0.031	23.453
Phase 2	0.001	0.130	0.000	376.9	0.001	0.001	23.669
Phase 3	0.004	0.225	0.003	320.3	0.003	0.002	27.832

Weighted	0.00987	0.43116	0.00350	361.547	0.00287	0.00715	
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### Fuel Economy

	Gasoline MPG
Phase 1	23.40
Phase 2	23.62
Phase 3	27.77

### Dyno Settings

Dyno #: D002

Inertia: 3625

EPA Set Co A: 6.7800002

EPA Set Co B: 0.27779999

EPA Set Co C: 0.01644

Weighted 24.55

Emiss-Bench: D002

v120518 - d002 EPAVDAEm120524115030

Page 1 of 2

Print Time 29-May-2012 14:53

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0208-002

Vehicle ID: R136RXX-0020

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.139	5.188	0.044	1350.0	0.030	0.110	1.098
Phase 2	0.005	0.499	0.000	1441.8	0.003	0.002	
Phase 3	0.015	0.808	0.012	1147.8	0.010	0.006	

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.92	28.92	28.92	
Avg Cell Temp (degF)	75.08	75.03	75.19	
Dew Point (degF)	49.31	49.19	49.23	
Specific Humidity (grains/lbm)	54.00	53.77	53.84	
NOx Corr Factor	0.9102	0.9093	0.9095	
CO2 Dilution Factor	15.689	24.537	18.349	
CFV Vmix (scf @68F)	3225.48	5520.00	3215.06	
CVS Flow Rate Avg (scfm)	381.41	380.65	380.56	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.40	870.10	506.90	
Distance (miles)	3.570	3.826	3.583	
Bag Analysis Time (secs)	79.0	74.0	73.6	

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian (EEO)"  
**Sent:** Wed 5/30/2012 6:09:22 PM  
**Subject:** RE: Test data for in-use vehicle R136-0020  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Thank you very much.

The results look pretty good and the vehicle passed the standards.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

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<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [<mailto:Sohacki.Lynn@epamail.epa.gov>]  
Sent: Wednesday, May 30, 2012 1:12 PM  
To: Berenz, Sebastian (EEO)

Subject: Test data for in-use vehicle R136-0020

Hi, Sebastian.

The data for the above vehicle is attached. Please give me a call if you have any questions.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: R136RXX-0020.pdf)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Wed 5/30/2012 7:56:54 PM  
**Subject:** VW Group - Decision Information submitted for VID D3UB-CAQ

Hi Jim,

I submitted test data and DI for the 2013 Audi A6 quattro 2.0L TFSI. This is a new worst case EDV for the test group DADXV02.03UB already certified.

Manufacturer retests are required for FTP and HWY cycles due to High Fuel Economy for the ETW.

No new technology is used.

A running change and revised application will follow.

Regards,

Bill Rodgers

VWGoA



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 5/31/2012 4:49:49 PM  
**Subject:** VW Group - Certificate Requested for TG DVWXV03.6U41

Hello Jim,

Just a heads up that I submitted a new application and Certificate Request for 2013 Test Group DVWXV03.6U41, VW Passat 3.6L VR6. If you can get it processed by the end of next week that's fine.

Regards,

Bill Rodgers

**To:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 5/31/2012 6:57:32 PM  
**Subject:** Re: Testing Strategy Approval Request - Audi A8 Start/Stop Systems  
[winmail.dat](#)

Richard,

Background: In a May 8, 2012 meeting, VW/Audi staff presented EPA with a description of the stop/start system and cylinder deactivation system for these 2013 Audi A8 vehicles. The vehicle is equipped with what you called "Last-mode functionality," where the last stop/start setting (enable/disable mode) is restored after stopping and restarting the vehicle. In other words, the stop/start button is "latched" when stopping and restarting the vehicle. Although I had a conflict on May 8, 2012 and didn't get to drive the vehicle, it's my understanding that the May 8, 2012 drive was acceptable to all EPA engineers who drove it (including both the stop/start feature and the cylinder deactivation feature of the vehicle).

Regarding your current request to perform one test for the Highway, SC03 and Cold FTP cycle (and two sets of FTP and US06 tests----with and without the stop/start system enabled), we believe that your request sounds reasonable to us, and it is hereby approved.

Please call or email me if you have questions about this email.

Regards

From: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
To: David Good/AA/USEPA/US@EPA, Jim Snyder/AA/USEPA/US@EPA  
Cc: Linc Wehrly/AA/USEPA/US@EPA, "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
Date: 05/21/2012 09:02 AM  
Subject: Testing Strategy Approval Request - Audi Start/Stop Systems

Hello Dave;

After our visit with the demonstration 4.0L V8 Audi A8 on May 8th and equipped with cylinder deactivation and start/stop strategy, we reviewed our testing strategy and have the following request.

The 3.0L V6 engine equipped Audi A8 emission data vehicle tested on May 2nd and May 8th at the EPA facility, was tested in two configurations. That is: complete five cycle tests with start/stop active and a complete second set of tests with start/stop system inactive at our facility in Ingolstadt . EPA confirmed the city tests in both configurations, start/stop active and inactive. Under the start/stop enable conditions you saw during the presentation, it is clear that the engine does not stop during three of the 5-cycle tests. There is no engine shut down in Highway, SC03 and Cold CO test cycles and only marginal engine stop in the US06 test cycle. The current start/stop strategy would yield on minor fuel economy improvement in the FTP and US06 cycle and therefore we would prefer to test only the FTP and US06 harmonically average the two sets of test configurations together at the 50/50 rate.

The high cost testing burden at our facility would be lessened and testing capacity could improve. Until which time there are some operational start/stop system strategy changes, we would propose to test only the FTP and US06 with start/stop active and inactive and average these tests at the 50/50 rate.

If you have any questions, please contact me directly.

Best regards,  
Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com<mailto:Richard.Thomas@VW.com>

**To:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 5/31/2012 6:57:32 PM  
**Subject:** Re: Testing Strategy Approval Request - Audi A8 Start/Stop Systems  
[winmail.dat](#)

Richard,

Background: In a May 8, 2012 meeting, VW/Audi staff presented EPA with a description of the stop/start system and cylinder deactivation system for these 2013 Audi A8 vehicles. The vehicle is equipped with what you called "Last-mode functionality," where the last stop/start setting (enable/disable mode) is restored after stopping and restarting the vehicle. In other words, the stop/start button is "latched" when stopping and restarting the vehicle. Although I had a conflict on May 8, 2012 and didn't get to drive the vehicle, it's my understanding that the May 8, 2012 drive was acceptable to all EPA engineers who drove it (including both the stop/start feature and the cylinder deactivation feature of the vehicle).

Regarding your current request to perform one test for the Highway, SC03 and Cold FTP cycle (and two sets of FTP and US06 tests----with and without the stop/start system enabled), we believe that your request sounds reasonable to us, and it is hereby approved.

Please call or email me if you have questions about this email.

Regards

**From:** "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
**To:** David Good/AA/USEPA/US@EPA, Jim Snyder/AA/USEPA/US@EPA  
**Cc:** Linc Wehrly/AA/USEPA/US@EPA, "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
**Date:** 05/21/2012 09:02 AM  
**Subject:** Testing Strategy Approval Request - Audi Start/Stop Systems

Hello Dave;

After our visit with the demonstration 4.0L V8 Audi A8 on May 8th and equipped with cylinder deactivation and start/stop strategy, we reviewed our testing strategy and have the following request.

The 3.0L V6 engine equipped Audi A8 emission data vehicle tested on May 2nd and May 8th at the EPA facility, was tested in two configurations. That is: complete five cycle tests with start/stop active and a complete second set of tests with start/stop system inactive at our facility in Ingolstadt . EPA confirmed the city tests in both configurations, start/stop active and inactive. Under the start/stop enable conditions you saw during the presentation, it is clear that the engine does not stop during three of the 5-cycle tests. There is no engine shut down in Highway, SC03 and Cold CO test cycles and only marginal engine stop in the US06 test cycle. The current start/stop strategy would yield on minor fuel economy improvement in the FTP and US06 cycle and therefore we would prefer to test only the FTP and US06 harmonically average the two sets of test configurations together at the 50/50 rate.

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Best regards,  
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Richard E. Thomas  
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3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com<mailto:Richard.Thomas@VW.com>

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Tue 6/5/2012 3:11:28 PM  
**Subject:** VW Group Certification Requests for 3.0L V6 TDI

Hello Jim,

I have submitted Applications and Certification Requests for the following 3.0L V6 TDI Test Groups:

All required manufacturer confirmatory tests have been completed.

Anything you can do to get these processed this week would be appreciated. Let me know if there are nay questions.

DADXT03.02UG – VW Touareg TDI (LDT3)

DADXT03.03UG – Audi Q7 TDI (LDT4)

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 6/5/2012 3:15:44 PM  
**Subject:** Re: VW Group Certification Requests for 3.0L V6 TDI

I already have other VW group cert requests that I working on through. Do you want me to jump to these two instead?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**Date:** 06/05/2012 11:11 AM  
**Subject:** VW Group Certification Requests for 3.0L V6 TDI

Hello Jim,  
I have submitted Applications and Certification Requests for the following 3.0L V6 TDI Test Groups:  
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DADXT03.03UG – Audi Q7 TDI (LDT4)

Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Tue 6/5/2012 5:13:29 PM  
**Subject:** RE: VW Group Certification Requests for 3.0L V6 TDI  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)

Hi Jim,

They are all about the same priority. Carry on.

Thanks Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, June 05, 2012 11:16 AM  
To: Rodgers, William (EEO)  
Subject: Re: VW Group Certification Requests for 3.0L V6 TDI

I already have other VW group cert requests that I working on through. Do you want me to jump to these two instead?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>  
Date: 06/05/2012 11:11 AM  
Subject: VW Group Certification Requests for 3.0L V6 TDI

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Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219

**To:** Verify Help Desk **Ex. 6**  
**Cc:** Robert Peavyhouse/AA/USEPA/US@EPA; David Good/AA/USEPA/US@EPA[]; avid Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Wed 6/6/2012 11:12:51 AM  
**Subject:** RE: GTI index 022 (HLP-2623)  
[winmail.dat](#)  
[message\\_body.rtf](#)

Hi **Ex. 6**

Please call me when you are available to talk a minute. Bill tried to enter this VWX division 1 carline 211 signed on as Audi, because it's an Audi test group, and it would not allow us to add this Volkswagen carline. The manufacturer code has to be Audi to add a carline to this Audi test group. This is the same type problem we have with the general label.

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Now I have several model indexes with the same situation, Lamborghini within an Audi Test group. Audi models within a Volkswagen test group and Bentley models within an Audi test group.

Thanks,  
Richard ( 248 754 4213 )

-----Original Message-----

**From:** **Ex. 6** On Behalf Of Verify Help Desk  
**Sent:** Tuesday, June 05, 2012 7:11 PM  
**To:** Thomas, Richard (EEO)  
**Subject:** Re: GTI index 022 (HLP-2623)

Hello Mr. Thomas,

You newly created carline code 211 has to exist in Verify as a certified model. In order to certify this carline you will need to unlock your test group and then add this carline to your test group in the Certified Models section on the Evap/Stnds/Models tab (see screen shot below).

To unlock your test group navigate to MyCDX > Verify: Light Duty > Request Certificate and select Process Code "U=Unlock Request."

After you have unlocked your test group and added this carline to the test group you will need to request another certificate and have your cert rep issue it.

Please note that the information that you enter in your general label submission will have to match what you enter in the Certified Models section in your test group submission (i.e. Transmission Type, Transmission Lockup, Transition Creeper Gear, Total Number of Transition Gears, and Drive System).

Please let me know if you have any further questions.

**Ex. 6**

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Verify Help Desk

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"Thomas, Richard

(EEO)"

<Richard.Thomas@v

To

w.com>

Verify Help Desk@CSC

cc

06/05/2012 12:55

PM

Subject

GTI index 022

Hello **Ex. 6**

We created carline 211 under VWX division 1 for the Volkswagen GTI and ran the label (index 022) again and got the following business rule messages.

To remind you, this model is certified in two Audi test groups. The information I put on the label input and at the Subconfiguration level are using ADX division 2 and the Audi test group names with associated sales numbers. If you would like to discuss please feel free to call me at, 248 754 4213.

Thanks,  
Richard

Transaction Identifier: \_9d6ac552-770c-4f0a-a0d5-69dc2a5642b5

#### Transaction Status Details

Transaction Status Identifier : REJECTED Transaction Message Text : GL-BR4 - The combination of Model Year (GL-3), Carline Manufacturer Code (GL-7), Division Code (GL-11) and Carline Code (GL-12) must exist in the system as a certified model.

Transaction Message Text : LD-FE-GL-BR98 - The combination of Carline Manufacturer Code (GL-10), Division Code (GL-11), and CarlineCode (GL-12) must exist at least once in the repeated subconfiguration sales information (GL-125.5, GL-125.6, and GL-125.7).

Transaction Message Text : LD-FE-GL-BR117 - The combination of Carline Manufacturer Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC =

3500) (Config Index = 1) (SubConfig Index = 1) (Test Group (GL-126) =

DAD XV02.03UA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code

(GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text : LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label. (SubConfiguration Test Group =

DAD XV02.03UA) Transaction Message Text : LD-FE-GL-BR117 - The combination of Carline Manufacturer Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC =

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DAD XV02.03PA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code

(GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text : LD-FE-GL-BR153 - All of the unique Test Groups submitted in the Subconfiguration Sales Information (GL-126) that have the same Carline as the Model Type for this FE Label must be submitted as one of the Unique Carline/Subconfiguration Test Groups (GL-207).

(SubConfiguration Test Group = DAD XV02.03PA) Transaction Message Text : LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label. (SubConfiguration Test Group =

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Thanks,  
Richard ( 248 754 4213 )

-----Original Message-----

From: **Ex. 6** On Behalf Of Verify Help Desk  
Sent: Tuesday, June 05, 2012 7:11 PM  
To: Thomas, Richard (EEO)  
Subject: Re: GTI index 022 (HLP-2623)

Hello Mr. Thomas,

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Please let me know if you have any further questions.

**Ex. 6**

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"Thomas, Richard  
(EEO)"  
<Richard.Thomas@v  
w.com> To  
Verify Help Desk@CSC  
cc  
06/05/2012 12:55  
PM Subject  
GTI index 022

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-----Original Message-----

From: **Ex. 6** On Behalf Of Verify Help Desk  
Sent: Tuesday, June 05, 2012 7:11 PM  
To: Thomas, Richard (EEO)  
Subject: Re: GTI index 022 (HLP-2623)

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Verify Help Desk  
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"Thomas, Richard  
(EEO)"  
<Richard.Thomas@v  
w.com>      Verify Help Desk@CSC      To  
cc  
06/05/2012 12:55  
PM      Subject  
GTI index 022

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Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC = 3500) (Config Index = 1) (SubConfig Index = 1) (Test Group (GL-126) = DADXV02.03UA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code (GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text : LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label. (SubConfiguration Test Group = DADXV02.03UA) Transaction Message Text : LD-FE-GL-BR117 - The combination of Carline Manufacturer Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC = 3500) (Config Index = 2) (SubConfig Index = 1) (Test Group (GL-126) = DADXV02.03PA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code (GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text : LD-FE-GL-BR153 - All of the unique Test Groups submitted in the Subconfiguration Sales Information (GL-126) that have the same Carline as the Model Type for this FE Label must be submitted as one of the Unique Carline/Subconfiguration Test Groups (GL-207). (SubConfiguration Test Group = DADXV02.03PA) Transaction Message Text : LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label. (SubConfiguration Test Group = DADXV02.03UA)

**To:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**Cc:** David Good/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; obert Peavyhouse/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** Ex. 6  
**Sent:** Wed 6/6/2012 2:34:59 PM  
**Subject:** RE: GTI index 022 (HLP-2623)

Hello Mr. Thomas,

Business rule TG-BR67 was returned for this submission because the owner of the carline VWX is different than the submitter's manufacturer code ADX. Because this is the case VWX must grant ADX permission to use a VWX carline.

For the VWX owner to grant permission for ADX to use its carline the VWX submitter must navigate to the Alternate Manufacturer tab of the Maintain Manufacturer Information module and make a submission granting ADX permission to do so.

Business rule TG-BR89 indicates that this Carline 212 is not in the system. Please check to be sure that an accepted carline submission was made for Carline 212.

After your test group submission is accepted a lock request should be made and the 'Yes' radio button should be selected for the 'Revised Certificate Needed' question. A comment can be added in the comment field about the 'Revised Certificate Needed' question indicating that a revised certificate is needed to certify VWX carlines for your general label submission.

I will also call you to discuss.

---

<TransactionStatusIdentifier>REJECTED</TransactionStatusIdentifier>  
<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>  
<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>  
<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>  
<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300)

of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>

<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>

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<TransactionMessageText>TG-BR89 - The provided Carline Manufacturer Code (TG-300), Division Code (TG-301), Carline Code (TG-302), and Model Year (TG-6) must specify a carline that exists in the system. (Manufacturer Code: VWX, Division Code: 1, Carline Code: 212, Model Year: 2013)</TransactionMessageText>

<TransactionMessageText>TG-BR89 - The provided Carline Manufacturer Code (TG-300), Division Code (TG-301), Carline Code (TG-302), and Model Year (TG-6) must specify a carline that exists in the system. (Manufacturer Code: VWX, Division Code: 1, Carline Code: 212, Model Year: 2013)</TransactionMessageText>

</TransactionStatusDetails>

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

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Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

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agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Thomas, Richard  
(EEO)"  
<Richard.Thomas@v To  
w.com> Verify Help Desk@CSC  
cc  
06/06/2012 07:12 ""Robert Peavyhouse  
AM (Peavyhouse.Robert@epamail.epa.gov)  
""  
<Peavyhouse.Robert@epamail.epa.gov>  
, ""Good.David@epamail.epa.gov""  
<Good.David@epamail.epa.gov>  
Subject  
RE: GTI index 022 (HLP-2623)

Hi **Ex. 6**

Please call me when you are available to talk a minute. Bill tried to enter this VWX division 1 carline 211 signed on as Audi, because it's an Audi test group, and it would not allow us to add this Volkswagen carline. The manufacturer code has to be Audi to add a carline to this Audi test group. This is the same type problem we have with the general label.

I must enter this Volkswagen model as a Volkswagen in order to create a Volkswagen label because the QR code is created as a Volkswagen VWX for Volkswagen models. If I signed on as Audi I am sure the label will run but the label will be created as Audi and then the QR code created will be wrong.

Now I have several model indexes with the same situation, Lamborghini within an Audi Test group. Audi models within a Volkswagen test group and Bentley models within an Audi test group.

Thanks,  
Richard ( 248 754 4213 )

-----Original Message-----

From: **Ex. 6** On Behalf Of Verify Help  
Desk

Sent: Tuesday, June 05, 2012 7:11 PM  
To: Thomas, Richard (EEO)  
Subject: Re: GTI index 022 (HLP-2623)

Hello Mr. Thomas,

You newly created carline code 211 has to exist in Verify as a certified model. In order to certify this carline you will need to unlock your test group and then add this carline to your test group in the Certified Models section on the Evap/Stdns/Models tab (see screen shot below).

To unlock your test group navigate to MyCDX > Verify: Light Duty > Request Certificate and select Process Code "U=Unlock Request."

After you have unlocked your test group and added this carline to the test group you will need to request another certificate and have your cert rep issue it.

Please note that the information that you enter in your general label submission will have to match what you enter in the Certified Models section in your test group submission (i.e. Transmission Type, Transmission Lockup, Transition Creeper Gear, Total Number of Transition Gears, and Drive System).

Please let me know if you have any further questions.

**Ex. 6**

(Embedded image moved to file: pic08624.gif)

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Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

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"Thomas, Richard  
(EEO)"  
<Richard.Thomas@v To  
w.com> Verify Help Desk@CSC  
cc  
06/05/2012 12:55  
PM Subject  
GTI index 022

Hello **Ex. 6**

We created carline 211 under VWX division 1 for the Volkswagen GTI and ran the label (index 022) again and got the following business rule messages. To remind you, this model is certified in two Audi test groups. The information I put on the label input and at the Subconfiguration level are using ADX division 2 and the Audi test group names with associated sales numbers. If you would like to discuss please feel free to call me at, 248 754 4213.

Thanks,  
Richard

Transaction Identifier: \_9d6ac552-770c-4f0a-a0d5-69dc2a5642b5

#### Transaction Status Details

Transaction Status Identifier : REJECTED Transaction Message Text : GL-BR4 - The combination of Model Year (GL-3), Carline Manufacturer Code (GL-7), Division Code (GL-11) and Carline Code (GL-12) must exist in the system as a certified model.

Transaction Message Text : LD-FE-GL-BR98 - The combination of Carline Manufacturer Code (GL-10), Division Code (GL-11), and CarlineCode (GL-12) must exist at least once in the repeated subconfiguration sales information (GL-125.5, GL-125.6, and GL-125.7).

Transaction Message Text : LD-FE-GL-BR117 - The combination of Carline Manufacturer Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC = 3500) (Config Index = 1) (SubConfig Index = 1) (Test Group (GL-126) =

DAD XV02.03UA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code (GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text : LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label. (SubConfiguration Test Group = DAD XV02.03UA) Transaction Message Text : LD-FE-GL-BR117 - The combination of Carline Manufacturer Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC = 3500) (Config Index = 2) (SubConfig Index = 1) (Test Group (GL-126) = DAD XV02.03PA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code (GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text : LD-FE-GL-BR153 - All of the unique Test Groups submitted in the Subconfiguration Sales Information (GL-126) that have the same Carline as the Model Type for this FE Label must be submitted as one of the Unique Carline/Subconfiguration Test Groups (GL-207). (SubConfiguration Test Group = DAD XV02.03PA) Transaction Message Text : LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label. (SubConfiguration Test Group = DAD XV02.03UA)



**To:** Verify Help Desk [Ex. 6] Thomas, Richard (EEO)"  
[Richard.Thomas@vw.com]  
**Cc:** David Good/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA[]; obert  
Peavyhouse/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Wed 6/6/2012 5:03:14 PM  
**Subject:** RE: GTI index 022 (HLP-2623)

Hello [Ex. 6]

Certificate Requests have been submitted for both test groups as requested:  
DAD XV02.03PA and  
DAD XV02.03UA

Bill Rodgers  
VWGoA  
248-754-4219

-----Original Message-----

**From:** [Ex. 6] On Behalf Of Verify Help Desk  
**Sent:** Wednesday, June 06, 2012 10:35 AM  
**To:** Thomas, Richard (EEO)  
**Cc:** 'Good.David@epamail.epa.gov'; 'Robert Peavyhouse (Peavyhouse.Robert@epamail.epa.gov)';  
Rodgers, William (EEO)  
**Subject:** RE: GTI index 022 (HLP-2623)

Hello Mr. Thomas,

Business rule TG-BR67 was returned for this submission because the owner of the carline VWX is different than the submitter's manufacturer code ADX.  
Because this is the case VWX must grant ADX permission to use a VWX carline.

For the VWX owner to grant permission for ADX to use its carline the VWX submitter must navigate to the Alternate Manufacturer tab of the Maintain Manufacturer Information module and make a submission granting ADX permission to do so.

Business rule TG-BR89 indicates that this Carline 212 is not in the system.  
Please check to be sure that an accepted carline submission was made for Carline 212.

After your test group submission is accepted a lock request should be made and the 'Yes' radio button should be selected for the 'Revised Certificate Needed' question. A comment can be added in the comment field about the 'Revised Certificate Needed' question indicating that a revised certificate is needed to certify VWX carlines for your general label submission.

I will also call you to discuss.

---

<TransactionStatusIdentifier>REJECTED</TransactionStatusIdentifier>  
<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the

carline.</TransactionMessageText>  
<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>  
<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>  
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<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>  
<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>  
<TransactionMessageText>TG-BR89 - The provided Carline Manufacturer Code (TG-300), Division Code (TG-301), Carline Code (TG-302), and Model Year (TG-6) must specify a carline that exists in the system. (Manufacturer Code: VWX, Division Code: 1, Carline Code: 212, Model Year: 2013)</TransactionMessageText>  
<TransactionMessageText>TG-BR89 - The provided Carline Manufacturer Code (TG-300), Division Code (TG-301), Carline Code (TG-302), and Model Year (TG-6) must specify a carline that exists in the system. (Manufacturer Code: VWX, Division Code: 1, Carline Code: 212, Model Year: 2013)</TransactionMessageText>  
</TransactionStatusDetails>

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Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

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"Thomas, Richard  
(EEO)"  
<Richard.Thomas@v To  
w.com> Verify Help Desk@CSC  
cc  
06/06/2012 07:12 ""Robert Peavyhouse  
AM (Peavyhouse.Robert@epamail.epa.gov)  
""  
<Peavyhouse.Robert@epamail.epa.gov>  
, ""Good.David@epamail.epa.gov""  
<Good.David@epamail.epa.gov>  
Subject  
RE: GTI index 022 (HLP-2623)

Hi **Ex. 6**

Please call me when you are available to talk a minute. Bill tried to enter this VWX division 1 carline 211 signed on as Audi, because it's an Audi test group, and it would not allow us to add this Volkswagen carline. The manufacturer code has to be Audi to add a carline to this Audi test group. This is the same type problem we have with the general label.

I must enter this Volkswagen model as a Volkswagen in order to create a Volkswagen label because the QR code is created as a Volkswagen VWX for Volkswagen models. If I signed on as Audi I am sure the label will run but the label will be created as Audi and then the QR code created will be wrong.

Now I have several model indexes with the same situation, Lamborghini within an Audi Test group. Audi models within a Volkswagen test group and Bentley models within an Audi test group.

Thanks,  
Richard ( 248 754 4213 )

-----Original Message-----

From: **Ex. 6** On Behalf Of Verify Help Desk  
Sent: Tuesday, June 05, 2012 7:11 PM  
To: Thomas, Richard (EEO)  
Subject: Re: GTI index 022 (HLP-2623)

Hello Mr. Thomas,

You newly created carline code 211 has to exist in Verify as a certified model. In order to certify this carline you will need to unlock your test group and then add this carline to your test group in the Certified Models section on the Evap/Stnds/Models tab (see screen shot below).

To unlock your test group navigate to MyCDX > Verify: Light Duty > Request Certificate and select Process Code "U=Unlock Request."

After you have unlocked your test group and added this carline to the test group you will need to request another certificate and have your cert rep issue it.

Please note that the information that you enter in your general label submission will have to match what you enter in the Certified Models section in your test group submission (i.e. Transmission Type, Transmission Lockup, Transition Creeper Gear, Total Number of Transition Gears, and Drive System).

Please let me know if you have any further questions.

### **Ex. 6**

(Embedded image moved to file: pic08624.gif)

Verify Help Desk

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"Thomas, Richard

(EEO)"

<Richard.Thomas@v  
w.com>

To

Verify Help Desk@CSC

cc

06/05/2012 12:55

PM

Subject

GTI index 022

Hello: **Ex. 6**

We created carline 211 under VWX division 1 for the Volkswagen GTI and ran the label (index 022) again and got the following business rule messages.

To remind you, this model is certified in two Audi test groups. The information I put on the label input and at the Subconfiguration level are using ADX division 2 and the Audi test group names with associated sales numbers. If you would like to discuss please feel free to call me at, 248 754 4213.

Thanks,  
Richard

Transaction Identifier: \_9d6ac552-770c-4f0a-a0d5-69dc2a5642b5

#### Transaction Status Details

Transaction Status Identifier : REJECTED Transaction Message Text : GL-BR4

- The combination of Model Year (GL-3), Carline Manufacturer Code (GL-7), Division Code (GL-11) and Carline Code (GL-12) must exist in the system as a certified model.

Transaction Message Text : LD-FE-GL-BR98 - The combination of Carline Manufacturer Code (GL-10), Division Code (GL-11), and CarlineCode (GL-12) must exist at least once in the repeated subconfiguration sales information (GL-125.5, GL-125.6, and GL-125.7).

Transaction Message Text : LD-FE-GL-BR117 - The combination of Carline Manufacturer Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC =

3500) (Config Index = 1) (SubConfig Index = 1) (Test Group (GL-126) =

DADXV02.03UA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code

(GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text :

LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label.

(SubConfiguration Test Group = DADXV02.03UA) Transaction Message Text :

LD-FE-GL-BR117 - The combination of Carline Manufacturer Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70),

Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC =

3500) (Config Index = 2) (SubConfig Index = 1) (Test Group (GL-126) =

DADXV02.03PA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code

(GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text :

LD-FE-GL-BR153 - All of the unique Test Groups submitted in the Subconfiguration Sales Information (GL-126) that have the same Carline as the Model Type for this FE Label must be submitted as one of the Unique Carline/Subconfiguration Test Groups (GL-207).

(SubConfiguration Test Group = DADXV02.03PA) Transaction Message Text :

LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label.

(SubConfiguration Test Group = DADXV02.03UA)



**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** David Good/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;"Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; obert Peavyhouse/AA/USEPA/US@EPA;"Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; erify Help Desk [Ex. 6]  
**From:** Ex. 6  
**Sent:** Wed 6/6/2012 5:11:11 PM  
**Subject:** RE: GTI index 022 (HLP-2623)

Hello Mr. Rodgers and Mr. Thomas,

Your EPA Cert Rep will now need to issue the certificates in order for the carlines to be certified. Please contact your EPA Cert Rep and request that the certificates be issued.

**Ex. 6**

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

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"Rodgers, William (EEO)"  
<William.Rodgers@vw.com> To  
Ex. 6 @CSC, "Thomas, Richard (EEO)"  
06/06/2012 01:03 PM <Richard.Thomas@vw.com>  
cc  
"Good.David@epamail.epa.gov"  
<Good.David@epamail.epa.gov>,  
"Robert Peavyhouse (Peavyhouse.Robert@epamail.epa.gov)"  
"  
<Peavyhouse.Robert@epamail.epa.gov>  
Subject  
RE: GTI index 022 (HLP-2623)

Hello [Ex. 6]

Certificate Requests have been submitted for both test groups as requested:  
DADXV02.03PA and  
DADXV02.03UA

Bill Rodgers  
VWGoA  
248-754-4219

-----Original Message-----

From: [Ex. 6] On Behalf Of Verify Help  
Desk

Sent: Wednesday, June 06, 2012 10:35 AM  
To: Thomas, Richard (EEO)  
Cc: 'Good.David@epamail.epa.gov'; 'Robert Peavyhouse  
(Peavyhouse.Robert@epamail.epa.gov)'; Rodgers, William (EEO)  
Subject: RE: GTI index 022 (HLP-2623)

Hello Mr. Thomas,

Business rule TG-BR67 was returned for this submission because the owner of the carline VWX is different than the submitter's manufacturer code ADX. Because this is the case VWX must grant ADX permission to use a VWX carline.

For the VWX owner to grant permission for ADX to use its carline the VWX submitter must navigate to the Alternate Manufacturer tab of the Maintain Manufacturer Information module and make a submission granting ADX permission to do so.

Business rule TG-BR89 indicates that this Carline 212 is not in the system. Please check to be sure that an accepted carline submission was made for Carline 212.

After your test group submission is accepted a lock request should be made and the 'Yes' radio button should be selected for the 'Revised Certificate Needed' question. A comment can be added in the comment field about the 'Revised Certificate Needed' question indicating that a revised certificate is needed to certify VWX carlines for your general label submission.

I will also call you to discuss.

---

<TransactionStatusIdentifier>REJECTED</TransactionStatusIdentifier>



<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>

<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>

<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>

<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>

<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>

<TransactionMessageText>TG-BR67 - If the Manufacturer Code (TG-300) of the owner of the carline is different than the Submitter's Manufacturer Code (in Submission Author Details), then permission must be granted by the Owner Manufacturer for the Submitting Manufacturer to use the carline.</TransactionMessageText>

<TransactionMessageText>TG-BR89 - The provided Carline Manufacturer Code (TG-300), Division Code (TG-301), Carline Code (TG-302), and Model Year (TG-6) must specify a carline that exists in the system. (Manufacturer Code: VWX, Division Code: 1, Carline Code: 212, Model Year: 2013)</TransactionMessageText>

<TransactionMessageText>TG-BR89 - The provided Carline Manufacturer Code (TG-300), Division Code (TG-301), Carline Code (TG-302), and Model Year (TG-6) must specify a carline that exists in the system. (Manufacturer Code: VWX, Division Code: 1, Carline Code: 212, Model Year: 2013)</TransactionMessageText>

</TransactionStatusDetails>

Verify Help Desk  
Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

Verify Help Desk  
Staffed by Computer Sciences Corporation, Contractor to the Environmental  
Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Thomas, Richard  
(EEO)"  
<Richard.Thomas@v To  
w.com> [Ex. 6]@CSC  
cc  
06/06/2012 07:12 ""Robert Peavyhouse  
AM (Peavyhouse.Robert@epamail.epa.gov)  
""  
<Peavyhouse.Robert@epamail.epa.gov>  
, ""Good.David@epamail.epa.gov""  
<Good.David@epamail.epa.gov>  
Subject  
RE: GTI index 022 (HLP-2623)

Hi [Ex. 6]

Please call me when you are available to talk a minute. Bill tried to enter this VWX division 1 carline 211 signed on as Audi, because it's an Audi test group, and it would not allow us to add this Volkswagen carline. The manufacturer code has to be Audi to add a carline to this Audi test group. This is the same type problem we have with the general label.

I must enter this Volkswagen model as a Volkswagen in order to create a Volkswagen label because the QR code is created as a Volkswagen VWX for Volkswagen models. If I signed on as Audi I am sure the label will run but the label will be created as Audi and then the QR code created will be wrong.

Now I have several model indexes with the same situation, Lamborghini within an Audi Test group. Audi models within a Volkswagen test group and Bentley models within an Audi test group.

Thanks,  
Richard ( 248 754 4213 )

-----Original Message-----

From: **Ex. 6** On Behalf Of Verify Help Desk  
Sent: Tuesday, June 05, 2012 7:11 PM  
To: Thomas, Richard (EEO)  
Subject: Re: GTI index 022 (HLP-2623)

Hello Mr. Thomas,

You newly created carline code 211 has to exist in Verify as a certified model. In order to certify this carline you will need to unlock your test group and then add this carline to your test group in the Certified Models section on the Evap/Stdns/Models tab (see screen shot below).

To unlock your test group navigate to MyCDX > Verify: Light Duty > Request Certificate and select Process Code "U=Unlock Request."

After you have unlocked your test group and added this carline to the test group you will need to request another certificate and have your cert rep issue it.

Please note that the information that you enter in your general label submission will have to match what you enter in the Certified Models section in your test group submission (i.e. Transmission Type, Transmission Lockup, Transition Creeper Gear, Total Number of Transition Gears, and Drive System).

Please let me know if you have any further questions.

**Ex. 6**

(Embedded image moved to file: pic08624.gif)

Verify Help Desk  
Staffed by Computer Sciences Corporation, Contractor to the Environmental  
Protection Agency

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"Thomas, Richard  
(EEO)"  
<Richard.Thomas@v  
w.com> To  
cc [Ex. 6]@CSC  
06/05/2012 12:55  
PM Subject  
GTI index 022

Hello [Ex. 6]

We created carline 211 under VWX division 1 for the Volkswagen GTI and ran the label (index 022) again and got the following business rule messages. To remind you, this model is certified in two Audi test groups. The information I put on the label input and at the Subconfiguration level are using ADX division 2 and the Audi test group names with associated sales numbers. If you would like to discuss please feel free to call me at, 248 754 4213.

Thanks,  
Richard

Transaction Identifier: \_9d6ac552-770c-4f0a-a0d5-69dc2a5642b5

Transaction Status Details

Transaction Status Identifier : REJECTED Transaction Message Text : GL-BR4  
- The combination of Model Year (GL-3), Carline Manufacturer Code (GL-7), Division Code (GL-11) and Carline Code (GL-12) must exist in the system as a certified model.

Transaction Message Text : LD-FE-GL-BR98 - The combination of Carline Manufacturer Code (GL-10), Division Code (GL-11), and CarlineCode (GL-12) must exist at least once in the repeated subconfiguration sales information (GL-125.5, GL-125.6, and GL-125.7).

Transaction Message Text : LD-FE-GL-BR117 - The combination of Carline Manufacturer Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC = 3500) (Config Index = 1) (SubConfig Index = 1) (Test Group (GL-126) = DAD XV02.03UA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code (GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text : LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label. (SubConfiguration Test Group = DAD XV02.03UA) Transaction Message Text : LD-FE-GL-BR117 - The combination of Carline Manufacturer Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126). (Base Level IWC = 3500) (Config Index = 2) (SubConfig Index = 1) (Test Group (GL-126) = DAD XV02.03PA) (Carline Manufacturer Code (GL-125.5) = ADX) (Division Code (GL-125.6) = 2) (Carline Code (GL-125.7) = 211) Transaction Message Text : LD-FE-GL-BR153 - All of the unique Test Groups submitted in the Subconfiguration Sales Information (GL-126) that have the same Carline as the Model Type for this FE Label must be submitted as one of the Unique Carline/Subconfiguration Test Groups (GL-207). (SubConfiguration Test Group = DAD XV02.03PA) Transaction Message Text : LD-FE-GL-BR154 - Test Groups listed in the Unique Carline/Subconfiguration Test Groups (GL-207) must be certified and must have one Certified Model Carline the same as the Carline of the Model Type for this FE Label. (SubConfiguration Test Group = DAD XV02.03UA)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 6/6/2012 6:51:40 PM  
**Subject:** VW Group - Decision Information for Audi A6/A7 3.0L

Hello Jim,

I have recently submitted decision information requests for 2 vehicles (A6 and A7) for Audi test group DADXJ03.03UF.

Some details:

- These vehicles are FEDV's and will support a running change letter which is on the way.
- The vehicles have stop/start as you should recall. We submitted tests under 4 configurations (see table below)
- Configuration 2 also has aevaporative tests which support a new evaporative family. This new family with "B" suffix is similar to the existing "A" suffix but with a 5 gram bleed canister.
- The vehicles all had high FE and will require mfr. re-tests if they are not selected by EPA.

Vehicle ID: D3UF-CAQ

Conf.	Model	Stop-Start	Other
0	A6	Active	
1	A6	In-Active	
2	A6	Active	* Evap tests for cfg #2
3	A6	In-Active	

Please contact me if you have any questions about this.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 6/6/2012 7:51:51 PM  
**Subject:** Re: VW Group - Decision Information for Audi A6/A7 3.0L

When can I see the running change letter? Can you tell me what the changes are? Does it have higher FE?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/06/2012 02:52 PM  
Subject: VW Group - Decision Information for Audi A6/A7 3.0L

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Regards,  
Mike



Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 6/6/2012 8:17:36 PM  
**Subject:** RE: VW Group - Decision Information for Audi A6/A7 3.0L  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

I will try to get the letter to you by tomorrow morning.

The main difference is that the vehicles now have start/stop. Comparing to MY2012, there is also a new engine code, which likely reflects a software change. I will ask though and forward a more detailed answer.

Regarding fuel economy:

For the A6: Compared to MY 2012, My 2013 was slightly worse for city, and 1 mpg better on highway.

For the A7: Compared to MY 2012, the MY2013 is slightly worse for both city and highway.

Also, per our recent agreement with Dave Good, we plan to average start / stop results only for the FTP and US06 tests. For the other tests (Hwy, SC03, Cold CO) we will use inactive configurations only for FE because Start-Stop mode has no effect.

Thanks

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, June 06, 2012 3:52 PM  
To: Giles, Michael (EEO)  
Subject: Re: VW Group - Decision Information for Audi A6/A7 3.0L

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Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
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Mike

Michael Giles  
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Engineering and Environmental Office  
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Auburn Hills, MI 48326  
United States of America  
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**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 6/6/2012 8:22:12 PM  
**Subject:** RE: VW Group - Decision Information for Audi A6/A7 3.0L  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Thanks for the clarification.

Yes, I thought I had sent you a confirmation earlier regarding the cycles but I guess I hadn't sent it.

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(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 06/06/2012 04:17 PM  
**Subject:** RE: VW Group - Decision Information for Audi A6/A7 3.0L

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**To:** Giles, Michael (EEO)

Subject: Re: VW Group - Decision Information for Audi A6/A7 3.0L

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Compliance Division  
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(734) 214-4946  
snyder.jim@epa.gov

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To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/06/2012 02:52 PM  
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United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 6/6/2012 8:42:49 PM  
**Subject:** RE: VW Group - Decision Information for Audi A6/A7 3.0L  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[mailto:Snyder.Jim@epamail.epa.gov](mailto:mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hi Jim,

We did get a note through Richard Thomas (email from Dave). Thanks for the quick reply.

On another topic, I uploaded another application today and tried to request a certificate for the Eos. This is a carryover test group (DVWXV02.03SA). You should see the request soon, unless it failed because of the GHG rule (I'm leaving before I find out if it passed VERFIY validation).

Thanks

Mike

From: Jim Snyder [<mailto:Snyder.Jim@epamail.epa.gov>]  
Sent: Wednesday, June 06, 2012 4:22 PM  
To: Giles, Michael (EEO)  
Subject: RE: VW Group - Decision Information for Audi A6/A7 3.0L

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[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

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2	A6	Active	* Evap tests for cfg #2
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Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

C157

## NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

## Test Information



Test Number: 2012-0217-002

Vehicle ID: R136RXX-0088

Test Date: 5/30/2012

MFR Name: VOLKSWAGEN

Key Start / Hot Soak: 08:45:16 / 09:35

MFR Codes: 590 VWX

Fuel Container ID: F00023

Config #: 00

Fuel Type: 61 Tier 2 Cert Test Fuel

Transmission: AUTO

Test Procedure: 21 Fed Fuel 2-day Exhaust (CAN LOAD)(ftp

Shift Schedule: A09980005

Calculation Method: Gasoline

Beginning Odometer: 015992.0 MI

Pretest Remarks:

Drive Schedule: ftp3bag

Soak Period: 17.6 hours

## Bag Data

	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
Phase 1	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample	5.703	58.667	0.327	0.852	2.449	
Ambient	2.780	0.356	0.015	0.046	2.063	
Net Concentration	3.101	58.334	0.313	0.808	0.519	2.531

Remarks:

## Phase 2

Sample	2.649	4.094	0.018	0.549	1.987	
Ambient	2.734	0.404	0.002	0.047	2.052	
Net Concentration	0.027	3.707	0.016	0.504	0.020	0.006

Remarks:

## Phase 3

Sample	2.724	5.062	0.815	0.732	2.024	
Ambient	2.721	0.550	0.000	0.046	2.017	
Net Concentration	0.151	4.542	0.815	0.689	0.117	0.023

Remarks:

## Phase 4

Sample	
Ambient	
Net Concentration	

Remarks:

## Results

	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.046	1.728	0.014	376.3	0.009	0.037	23.539
Phase 2	0.001	0.175	0.001	374.3	0.001	0.000	23.826
Phase 3	0.002	0.134	0.036	319.4	0.002	0.000	27.921
Weighted	0.01038	0.48610	0.01333	359.635	0.00265	0.00787	

## Fuel Economy

	<u>Gasoline MPG</u>	<u>Dyno Settings</u>	<u>Dyno #:</u>
Phase 1	23.48		D002
Phase 2	23.77		Inertia: 3625
Phase 3	27.86		EPA Set Co A: 7.8400002
			EPA Set Co B: 0.19499999
			EPA Set Co C: 0.017440001
Weighted	24.68		Emiss-Bench: D002

v120518 - d002 EPAVDAEm120530083359

Page 1 of 2

Print Time 31-May-2012 06:56

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0217-002

Vehicle ID: R136RXX-0088

### Results




	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.163	6.207	0.050	1351.5	0.032	0.133	1.098
Phase 2	0.002	0.675	0.004	1442.1	0.002	0.001	
Phase 3	0.008	0.482	0.129	1148.3	0.007	0.001	

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.88	28.88	28.89	
Avg Cell Temp (degF)	75.10	75.14	75.37	
Dew Point (degF)	48.99	49.28	49.26	
Specific Humidity (grains/lbm)	53.42	54.01	53.93	
NOx Corr Factor	0.9079	0.9102	0.9099	
CO2 Dilution Factor	15.615	24.392	18.288	
CFV Vmix (scf @68F)	3227.42	5522.47	3217.89	
CVS Flow Rate Avg (scfm)	381.94	380.73	380.59	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.00	870.30	507.30	
Distance (miles)	3.591	3.852	3.595	
Bag Analysis Time (secs)	74.9	75.5	74.0	

C15D

NVFEL Laboratory Test Data								CVS
Final Laboratory Test Results								
		Test Number: 2012-0217-004		Vehicle ID: R136RXX-0088				
		Test Date: 5/30/2012		MFR Name: VOLKSWAGEN				
		Key Start: 10:02:22		MFR Codes: 590 VWX				
		Fuel Container ID: F00023		Config #: 00				
		Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO				
Test Procedure: 03 HWFET (hwfetprep_hwfet)		Shift Schedule: A09980011						
Calculation Method: Gasoline		Beginning Odometer: 016004.0 MI						
Pretest Remarks:		Drive Schedule: hwfet_hwfet						
<b>Bag Data</b>								
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample		2.754	17.162	0.231	1.520	1.956		
Ambient		2.700	0.377	0.007	0.046	1.990		
Net Concentration		0.361	16.828	0.225	1.480	0.192	0.151	
Remarks:								
<b>Phase 2</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Phase 3</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Phase 4</b>								
Sample								
Ambient								
Net Concentration								
Remarks:								
<b>Results</b>								
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1		0.002	0.165	0.003	228.0	0.001	0.001	39.099
<b>Fuel Economy</b>								
	<u>Gasoline MPG</u>	<u>Dyno Settings</u>						
Phase 1	39.01	Dyno #: D002						
		Inertia: 3625						
		EPA Set Co A: 7.8400002						
		EPA Set Co B: 0.19499999						
		EPA Set Co C: 0.017440001						
		Emiss-Bench: D002						

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0217-004

Vehicle ID: R136RXX-0088

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.018	1.693	0.034	2338.6	0.011	0.008	1.098

### Test Conditions


	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.89			
Avg Cell Temp (degF)	74.96			
Dew Point (degF)	49.36			
Specific Humidity (grains/lbm)	54.16			
NOx Corr Factor	0.9108			
CO2 Dilution Factor	8.805			
CFV Vmix (scf @68F)	3050.78			

CVS Flow Rate Avg (scfm) 239.28

Fan Placement: One Fan - Up - Front

Phase Time (secs)	764.99
Distance (miles)	10.257
Bag Analysis Time (secs)	74.5

C150

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results							
Test Number: 2012-0217-005		Vehicle ID: R136RXX-0088					
	Test Date: 5/30/2012		MFR Name: VOLKSWAGEN				
	Key Start: 10:47:09		MFR Codes: 590 VWX				
	Fuel Container ID: F00023		Config #: 00				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO				
	Test Procedure: 90 US06 (us06warmup_us06)		Shift Schedule: A09980041				
	Calculation Method: Gasoline		Beginning Odometer: 016024.0 MI				
Pretest Remarks:		Drive Schedule: us06_us06					
<hr/>							
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	3.345	20.542	0.443	1.029	1.956		
Ambient	2.785	0.447	0.013	0.050	1.982		
Net Concentration	0.774	20.129	0.431	0.983	0.126	0.635	
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<hr/>							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.009	0.450	0.015	345.4	0.002	0.007	25.788
<hr/>							
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>	<u>Dyno Settings</u>					
Phase 1	25.73	Dyno #: D002					
		Inertia: 3625					
		EPA Set Co A: 7.8400002					
		EPA Set Co B: 0.19499999					
		EPA Set Co C: 0.017440001					
		Emiss-Bench: D002					

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0217-005

Vehicle ID: R136RXX-0088

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.069	3.596	0.116	2759.5	0.013	0.056	1.098

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.88			
Avg Cell Temp (degF)	74.98			
Dew Point (degF)	49.99			
Specific Humidity (grains/lbm)	55.47			
NOx Corr Factor	0.9159			
CO2 Dilution Factor	12.992			
CFV Vmix (scf @68F)	5419.36			

CVS Flow Rate Avg (scfm) 540.31

Fan Placement: USO6 Only - One Large Fan - Up - Front

Phase Time (secs)	601.79
Distance (miles)	7.990
Bag Analysis Time (secs)	74.6



**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian (EEO)"  
**Sent:** Thur 6/7/2012 3:18:07 PM  
**Subject:** RE: Test data for in-use vehicle R136-0088  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

Thank you for the test data.

The test results look pretty good and the car passed the standards

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Thursday, June 07, 2012 10:33 AM  
To: Berenz, Sebastian (EEO)  
Subject: Test data for in-use vehicle R136-0088

Hi, Sebastian.

The data for the above vehicle is attached. Please give me a call if you have any questions.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: R136RXX-0088.pdf)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 6/7/2012 7:41:01 PM  
**Subject:** RE: VW Group - Decision Information for Audi A6/A7 3.0L  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[mailto:Snyder.Jim@epamail.epa.gov](mailto:mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hello Jim,

FYI I sent a request for certificate today for this test group (DADXJ03.03UF) with new evaporative family DADXR0140C7B. For this running change, I also submitted a revised initial application with the running change letters and other data (CSI, etc.) updated.

Please review and let us know if you have questions to issue the certificate.

Note – please cc Bill on any messages tomorrow as I will be out of the office Friday.

Thanks,

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, June 06, 2012 4:22 PM  
To: Giles, Michael (EEO)  
Subject: RE: VW Group - Decision Information for Audi A6/A7 3.0L

Thanks for the clarification.

Yes, I thought I had sent you a confirmation earlier regarding the cycles but I guess I hadn't sent it.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946

snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 06/06/2012 04:17 PM  
Subject: RE: VW Group - Decision Information for Audi A6/A7 3.0L

I will try to get the letter to you by tomorrow morning.

The main difference is that the vehicles now have start/stop. Comparing to MY2012, there is also a new engine code, which likely reflects a software change. I will ask though and forward a more detailed answer.

Regarding fuel economy:

For the A6: Compared to MY 2012, MY 2013 was slightly worse for city, and 1 mpg better on highway.

For the A7: Compared to MY 2012, the MY2013 is slightly worse for both city and highway.

Also, per our recent agreement with Dave Good, we plan to average start / stop results only for the FTP and US06 tests. For the other tests (Hwy, SC03, Cold CO) we will use inactive configurations only for FE because Start-Stop mode has no effect.

Thanks  
Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, June 06, 2012 3:52 PM  
To: Giles, Michael (EEO)  
Subject: Re: VW Group - Decision Information for Audi A6/A7 3.0L

When can I see the running change letter? Can you tell me what the changes are? Does it have higher FE?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/06/2012 02:52 PM  
Subject: VW Group - Decision Information for Audi A6/A7 3.0L

Hello Jim,

I have recently submitted decision information requests for 2 vehicles (A6 and A7) for Audi test group DADXJ03.03UF.

Some details:

- These vehicles are FEDV's and will support a running change letter which is on the way.
- The vehicles have stop/start as you should recall. We submitted tests under 4 configurations (see table below)
- Configuration 2 also has evaporative tests which support a new evaporative family. This new family with "B" suffix is similar to the existing "A" suffix but with a 5 gram bleed canister.
- The vehicles all had high FE and will require mfr. re-tests if they are not selected by EPA.

Vehicle ID: D3UF-CAQ

Conf.	Model	Stop-Start	Other
0	A6	Active	
1	A6	In-Active	
2	A6	Active	* Evap tests for cfg #2
3	A6	In-Active	

Please contact me if you have any questions about this.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Fri 6/8/2012 2:24:19 PM  
**Subject:** VW Group - 2013 Tiguan test decision information

Hi Jim,

I submitted new fuel economy tests and Decision Information for the two configurations of 2013 Tiguan 2.0T Front-wheel drive (with and without low resistance tires). These models were already certified some time ago with carryover data from 2012 model year. The factory has since made a change in TCM software to for the 2013 Start of Production.

VW316 20145 – Configuration 2 (Front-wheel drive with Low resistance tires)

VW316 20145 – Configuration 3 (Front-wheel drive with Normal tires)

Regards,

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 6/11/2012 2:19:01 PM  
**Subject:** RE: VW Group Certification Requests for 3.0L V6 TDI

Hello Jim,

As a follow up, could you advise on the status of the two 3.0L diesel certificates below?

We are being told this is urgent, so any assistance you can provide would be appreciated.

Thanks,

Mike

From: Rodgers, William (EEO)  
Sent: Tuesday, June 05, 2012 11:11 AM  
To: 'Jim Snyder' (Snyder.Jim@epamail.epa.gov)  
Cc: Giles, Michael (EEO)  
Subject: VW Group Certification Requests for 3.0L V6 TDI

Hello Jim,

I have submitted Applications and Certification Requests for the following 3.0L V6 TDI Test Groups:

All required manufacturer confirmatory tests have been completed.

Anything you can do to get these processed this week would be appreciated. Let me know if there are nay questions.

DADXT03.02UG – VW Touareg TDI (LDT3)

DADXT03.03UG – Audi Q7 TDI (LDT4)

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219



**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 6/11/2012 3:01:14 PM  
**Subject:** RE: VW Group Certification Requests for 3.0L V6 TDI

So far it's looking like a fairly quiet week and there are none in front of them so this week looks likely unless I find some problems.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/11/2012 10:19 AM  
Subject: RE: VW Group Certification Requests for 3.0L V6 TDI

Hello Jim,

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Mike

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Cc: Giles, Michael (EEO)  
Subject: VW Group Certification Requests for 3.0L V6 TDI

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DADXT03.02UG – VW Touareg TDI (LDT3)  
DADXT03.03UG – Audi Q7 TDI (LDT4)

Regards,  
Bill Rodgers

VWGoA EEO  
(248) 754-4219

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 6/11/2012 3:11:30 PM  
**Subject:** RE: VW Group Certification Requests for 3.0L V6 TDI  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)

Great, thanks!

We will have another application for the 2.0L coming in hopefully today.

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, June 11, 2012 11:01 AM  
To: Giles, Michael (EEO)  
Subject: RE: VW Group Certification Requests for 3.0L V6 TDI

So far it's looking like a fairly quiet week and there are none in front of them so this week looks likely unless I find some problems.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/11/2012 10:19 AM  
Subject: RE: VW Group Certification Requests for 3.0L V6 TDI

Hello Jim,

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We are being told this is urgent, so any assistance you can provide would be appreciated.

Thanks,  
Mike

From: Rodgers, William (EEO)  
Sent: Tuesday, June 05, 2012 11:11 AM  
To: 'Jim Snyder' (Snyder.Jim@epamail.epa.gov)  
Cc: Giles, Michael (EEO)  
Subject: VW Group Certification Requests for 3.0L V6 TDI

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All required manufacturer confirmatory tests have been completed.  
Anything you can do to get these processed this week would be appreciated. Let me know if there are nay questions.

DADXT03.02UG – VW Touareg TDI (LDT3)  
DADXT03.03UG – Audi Q7 TDI (LDT4)

Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219

**To:** oliver-schmidt@vw.com[]  
**Cc:** CN=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;dale.harris@vw.com[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;dale.harris@vw.com[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;dale.harris@vw.com[]; eonard.kata@vw.com;dale.harris@vw.com[]; ale.harris@vw.com[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Mon 6/11/2012 4:58:12 PM  
**Subject:** 2013 light-duty Greenhouse gas - 2013 PreMY report questions & potential errors  
 VW-PreMY Rpt-CBI\_DVWXV\_COMMON\_CR1\_CAR\_R02[1]-from Verify-4-20-2012.zip  
<http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>

Oliver & Len,

I have some questions about Volkswagen's 2013 GHG Pre-Model year Report.

First of all, thanks for using the EPA templates. It makes it easy for me to review your Pre-MY report information.

1. Potential error in your fleet average calculations: Using the projected CREE fleet average estimates and CREE standards listed in your (attached) 2013 Pre-MY report spreadsheet, I come up with slightly different results for the total "Model Year Credits (Debits)" fields for car and trucks for 2012-2015 model years. For example, my calculations for 2013-2015 model year result in the following credit (Megagram) values:

Category	D.Good CREE Calcs	VW CREE values	Comments
2013 Pass Car	(730,335)	(778,903)	
2013 Light Truck	87,527	87,527	agrees with VW
2014 Pass Car	(79,674)	(91,543)	
2014 Light Truck	(16,902)	(17,244)	
2015 Pass Car	(424,806)	(395,074)	
2015 Light Truck	(272,380)	(275,812)	

My calculations, for example, for 2013 cars are  $[(258 - 269)(550,837)(195,264)/1,000,000]$  - 404,242 (A/C credits) = 778,903 credits. It looks like your calculations are not rounding the CREE standards and fleet average CREE values to the nearest whole gram/mile, as required by EPA regulations.

Please advise.

**Ex. 4 - CBI**

Please advise.

3. Bugatti: Bugati models appear to be missing in your 2013-2015 templates.

Please advise

4. Three AB&T Spreadsheets: Your report contains three AB&T spreadsheets. None of them include projections for 2014 or 2015 model year credits. Please combine the three spreadsheets into one AB&T spreadsheet which includes a listing for 2014 and 2015 credits.

Please advise.

5. A/C Leakage and Efficiency Credits: Your 2013 Pre-MY report doesn't contain any details of how the A/C credits were generated for each model. Please provide a little more detail about how the A/C leakage and A/C efficiency credits will be generated for 2012 and 2013 model year vehicles, and (if possible) 2014 and 2015 model year vehicles---similar to the level of detail provided in the EPA templates available at <http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>.

Please advise.

6. Possible Merger of VW and Porsche: Over the past year, there have been some articles in the press about a potential merger of VW & Porsche. If possible, please provide a brief summary of the status of that possible merger and any potential effects on VW's 2013 GHG compliance plans.

In summary, please email us the answers to my questions and send us a corrected 2013 PreMY Report (if needed) as soon as practicable. If you like, we will be glad to schedule a conference call at your convenience to discuss these questions and the potential errors.

Note: I encrypted the attached files using the same password as I used last year when I sent Richard Thomas for the 2013 FE label spreadsheets. I'll call you with the password, just in case you need it.  
Thanks

**To:** David Good/AA/USEPA/US@EPA[]  
**From:** postmaster@volkswagen.de  
**Sent:** Mon 6/11/2012 5:05:49 PM  
**Subject:** [Possible VIRUS!] Delivery Status Notification (Failure)  
<http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>

WARNING: This message contains attachments that the virus scanner was unable to scan. Open at your own risk or call the Helpdesk for assistance.

WARNING!!! (from amgwyot02.vwoa.na.vwg)

The following message attachments were flagged by the antivirus scanner:

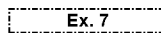
Attachment [2.3.2.2] VW-PreMY Rpt-CBI\_DVWXV\_COMMON\_CR1\_CAR\_R02[1]-from Verify-4-20-2012.zip, scan failed: File encrypted. Action taken: incomplete scan

Please contact the Help Desk at x44800 with any questions.

WARNING: This message contains attachments that the virus scanner was unable to scan. Open at your own risk or call the Helpdesk for assistance.

This is an automatically generated Delivery Status Notification.

Delivery to the following recipients failed.

 Ex. 7 @vw.com

Received: from mailgate1.vw.com ([10.136.103.246]) by vwoaahsxb100.vwoa.na.vwg with Microsoft SMTPSVC(6.0.3790.4675); Mon, 11 Jun 2012 13:05:48 -0400

Received: from localhost (localhost [127.0.0.1]) by amgwyin01.vwoa.na.vwg (MOS 4.3.4-GA) id IIO60280; Mon, 11 Jun 2012 13:05:48 -0400 (EDT)

Received: from mblast03.pyd.epa.gov (mblast03.pyd.epa.gov [161.80.134.170]) by amgwyin01.vwoa.na.vwg (MOS 4.3.4-GA) with ESMTTP id IIO60208; Mon, 11 Jun 2012 13:05:37 -0400

Received: from mblast03.pyd.epa.gov (localhost.localdomain [127.0.0.1]) by localhost (Postfix) with SMTP id 7A151D7C9E3; Mon, 11 Jun 2012 12:58:19 -0400 (EDT)

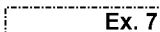
Received: from mintra03.pyd.epa.gov (mintra03.pyd.epa.gov [161.80.134.169]) by mblast03.pyd.epa.gov (Postfix) with ESMTTP id 4BAAAD7CA3B; Mon, 11 Jun 2012 12:58:19 -0400 (EDT)

Received: from mintra03.pyd.epa.gov (localhost.localdomain [127.0.0.1]) by localhost (Postfix) with SMTP id 32B347A82D6; Mon, 11 Jun 2012 12:58:19 -0400 (EDT)

Received: from w1818tdcgu113.aa.ad.epa.gov (w1818tdcgu113.aa.ad.epa.gov [161.80.134.171]) by mintra03.pyd.epa.gov (Postfix) with ESMTTP id F16327A82CB; Mon, 11 Jun 2012 12:58:18 -0400 (EDT)

Subject: 2013 light-duty Greenhouse gas - 2013 PreMY report questions & potential errors

To: oliver-schmidt@vw.com

Cc: Roberts French <French.Roberts@epamail.epa.gov>, Tom Anderson <Anderson.Tom@epamail.epa.gov>, Linc Wehrly <Wehrly.Linc@epamail.epa.gov>,  
 Ex. 7 @vw.com

Message-ID: <OF8B9C8F4B.4AD534F6-ON85257A17.0077F47F-85257A1A.005D383F@epamail.epa.gov>  
From: David Good <Good.David@epamail.epa.gov>

Date: Mon, 11 Jun 2012 12:58:12 -0400  
Content-Type: multipart/mixed; boundary="MIRAPOINT\_PART1\_4fd62563"

X-KeepSent: 8B9C8F4B:4AD534F6-85257A17:0077F47F; type=4; name=\$KeepSent

X-Mailer: Lotus Notes Release 8.5.2FP3 July 11, 2011  
X-MIMETrack: Serialize by Router on EPAHUB13/USEPA/US(Release 8.5.2FP2|March 22, 2011) at 06/11/2012 12:58:18 PM  
MIME-Version: 1.0  
X-Mirapoint-Virus-ScanFailure: SCANFAILURE; host=amgwyin01.vwoa.na.vwg; attachment=[2.2]; virus=File encrypted  
X-Junkmail-Status: score=10/48, host=amgwyin01.vwoa.na.vwg  
X-Junkmail-Signature-Raw: score=unknown, refid=str=0001.0A02020B.4FD62563.0124,ss=1,re=0.000,vtr=str,vl=0,fgs=0, ip=161.80.134.170, so=2011-11-01 07:33:11, dmn=2011-05-27 18:58:46, mode=single engine  
X-Junkmail-IWF: false  
X-Mirapoint-Loop-Id: 2e45e024428507712557a27c7c0e9567  
Return-Path: Good.David@epamail.epa.gov  
X-OriginalArrivalTime: 11 Jun 2012 17:05:48.0623 (UTC) FILETIME=[72BD8DF0:01CD47F4]

WARNING!!! (from amgwyin01.vwoa.na.vwg)

The following message attachments were flagged by the antivirus scanner:

Attachment [2.2] VW-PreMY Rpt-CBI\_DVWXV\_COMMON\_CR1\_CAR\_R02[1]-from Verify-4-20-2012.zip, scan failed: File encrypted. Action taken: incomplete scan

Please contact the Help Desk at x44800 with any questions.

WARNING: This message contains attachments that the virus scanner was unable to scan. Open at your own risk or call the Helpdesk for assistance.

Oliver & Len,

I have some questions about Volkswagen's 2013 GHG Pre-Model year Report.

First of all, thanks for using the EPA templates. It makes it easy for me to review your Pre-MY report information.

1. Potential error in your fleet average calculations: Using the projected CREE fleet average estimates and CREE standards listed in your (attached) 2013 Pre-MY report spreadsheet, I come up with slightly different results for the total "Model Year Credits (Debits)" fields for car and trucks for 2012-2015 model years. For example, my calculations for 2013-2015 model year result in the following credit (Megagram) values:

Category	D.Good CREE Calcs	VW CREE values	Comments
2013 Pass Car	(730,335)	(778,903)	
2013 Light Truck 87,527		87,527	agrees with VW
2014 Pass Car	(79,674)	(91,543)	
2014 Light Truck (16,902)		(17,244)	
2015 Pass Car	(424,806)	(395,074)	
2015 Light Truck (272,380)		(275,812)	

My calculations, for example, for 2013 cars are  $[(258 - 269)(550,837)(195,264)/1,000,000] - 404,242$  (A/C credits) = 778,903 credits. It looks like your calculations are not rounding the CREE standards and fleet average CREE values to the nearest whole gram/mile, as required by EPA regulations.



Please advise.

## Ex. 4 - CBI

Please advise.

3. Bugatti: Bugati models appear to be missing in your 2013-2015 templates.

Please advise

4. Three AB&T Spreadsheets: Your report contains three AB&T spreadsheets. None of them include projections for 2014 or 2015 model year credits. Please combine the three spreadsheets into one AB&T spreadsheet which includes a listing for 2014 and 2015 credits.

Please advise.

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Please advise.

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In summary, please email us the answers to my questions and send us a corrected 2013 PreMY Report (if needed) as soon as practicable. If you like, we will be glad to schedule a conference call at your convenience to discuss these questions and the potential errors.

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Thanks

(See attached file: VW-PreMY Rpt-CBI\_DVWXV\_COMMON\_CR1\_CAR\_R02[1]-from Verify-4-20-2012.zip)

WARNING: This message contains attachments that the virus scanner was unable to scan. Open at your own risk or call the Helpdesk for assistance.

WARNING: The virus scanner was unable to scan the next attachment. This attachment could possibly contain viruses or other malicious programs. The attachment could not be

scanned for the following reasons:

The file was encrypted

You are advised NOT to open this attachment unless you are completely sure of its contents. If in doubt, please contact your system administrator.

The identifier for this message is '4FD62571\_31915\_2938\_1'.

EPA Postmaster

EPA PM Admin <EPA\_PM\_Admin@epamail.epa.gov>

\*\*\*\*\* ATTACHMENT NOT DELIVERED \*\*\*\*\*

This Email message contained an attachment named VW-PreMY Rpt-CBI\_DVWXV\_COMMON\_CR1\_CAR\_R02[1]-from Verify-4-20-2012.zip which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name.

For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

\*\*\*\*\* ATTACHMENT NOT DELIVERED \*\*\*\*\*

**To:** oliver.schmidt@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Mon 6/11/2012 5:13:03 PM  
**Subject:** Fw: 2013 light-duty Greenhouse gas - 2013 PreMY report questions & potential errors [Resending]  
<http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>

Oliver,

I'm resending this to your correct email address.

Dave

----- Forwarded by David Good/AA/USEPA/US on 06/11/2012 01:12 PM -----

**From:** David Good/AA/USEPA/US  
**To:** oliver-schmidt@vw.com  
**Cc:** Roberts French/AA/USEPA/US@EPA, Tom Anderson/AA/USEPA/US@EPA, Linc Wehrly/AA/USEPA/US@EPA, leonard.kata@vw.com, dale.harris@vw.com  
**Date:** 06/11/2012 12:58 PM  
**Subject:** 2013 light-duty Greenhouse gas - 2013 PreMY report questions & potential errors

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Please advise.

2. Standards Calculator - Potential error in projected production volume: The projected production volume values listed in the 2013-2015 Standards calculator spreadsheets don't agree with the projected production volume listed in the 2013-2015 fleet average spreadsheets. For example the 2013 car production volume is listed as 565,654 in the 2013 car standards calculator but 550,837 in the 2013 car fleet average spreadsheet. Alos, please note that a standards calculator spreadsheet was not included in your Pre-MY report for 2013 model year trucks.

Please advise.

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Please advise

4. Three AB&T Spreadsheets: Your report contains three AB&T spreadsheets. None of them include projections for 2014 or 2015 model year credits. Please combine the three spreadsheets into one AB&T spreadsheet which includes a listing for 2014 and 2015 credits.

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[attachment "VW-PreMY Rpt-CBI\_DVWXV\_COMMON\_CR1\_CAR\_R02[1]-from Verify-4-20-2012.zip" deleted by David Good/AA/USEPA/US]

**To:** oliver.schmidt@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Mon 6/11/2012 5:14:25 PM  
**Subject:** Fw: 2013 light-duty Greenhouse gas - 2013 PreMY report questions & potential errors  
[Resending with the attachment]  
[VW-PreMY Rpt-CBI DVWXV COMMON CR1 CAR R02\[1\]-from Verify-4-20-2012.zip](#)  
<http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>

Resending with the attachment this time.

Dave

----- Forwarded by David Good/AA/USEPA/US on 06/11/2012 01:13 PM -----

**From:** David Good/AA/USEPA/US  
**To:** oliver-schmidt@vw.com  
**Cc:** Roberts French/AA/USEPA/US@EPA, Tom Anderson/AA/USEPA/US@EPA, Linc Wehrly/AA/USEPA/US@EPA, leonard.kata@vw.com, dale.harris@vw.com  
**Date:** 06/11/2012 12:58 PM  
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Thanks

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Tue 6/12/2012 3:34:17 PM  
**Subject:** VW Group - Revised Certificate Requests

Hi Jim,

I have processed Revised Test Group and Certificate Requests for the following TG/Evap combinations:

Changes to the Manufacturer Codes and Division numbers were required to comply with Verify Fuel Economy Program and Release 10. Please process the approvals so we can get the fuel economy entered into the system.

cert\_request\_DAD XV05.2LR8\_DAD XR0130R8A

cert\_request\_DAD XV04.03UJ\_DAD XR0130D61

cert\_request\_DVWXV06.3UA8\_DVWXR0155D4B

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 6/12/2012 5:08:20 PM  
**Subject:** VW Group - Audi Test Group DADXJ03.03UF

Hi Jim,

As a follow up to my voice message, I am trying to make a minor correction to the test group data for the above test group (evap DF's need correction).

However, I get a rejection message indicating a possible open cert request. I ran a report for open cert requests which shows one item for this test group (below).

I think perhaps you could reject this and I will re-submit, or let me know if you need more info or have any suggestions.

Thanks,

Mike

#### Certificate Request Submission Information

#### Certificate Request Information Details

Request Process Code : N  
Manufacturer Specific Details

EPA Manufacturer Code : ADX  
Model Year : 2013  
Test Group Name : DADXJ03.03UF  
Commerce Introduction Date : 20120806

#### Application Specific Details

Meet All Applicable Standards Indicator : Y  
Meet All Applicable Requirements Indicator : Y  
OBD System Approval Indicator : Y  
CARB Executive Order Issued Indicator : NA



ORVR System Approval Indicator : Y  
Compliance Fee Paid Indicator : Y  
No Defeat Device Indicator : Y  
CAP2000 Conditional Indicator : N  
ICI Certificate Indicator : N  
Alternate Fuel Converter Certificate Indicator : N

EPA Generated Certificate Request Details

Original Receipt Date : 20120607  
Certificate Status Text : UNDREV

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 6/12/2012 8:33:01 PM  
**Subject:** RE: VW Group - Decision Information for Audi A6/A7 3.0L  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Snyder.Jim@epamail.epa.gov>  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hello Jim,

As a follow up for our running change for test group (DADXJ03.03UF) with new evaporative family DADXR0140C7B:

It was necessary to correct the application to correct some minor errors in deterioration factors. So, that was done and submitted today. Due to the VERIFY locking issues I have requested another certificate.

Please note that the running change letter is in the application. Let us know if you need anything further from us to process the new certificate.

Thanks,

Mike

From: Giles, Michael (EEO)  
Sent: Thursday, June 07, 2012 3:41 PM  
To: 'Jim Snyder'  
Cc: Rodgers, William  
Subject: RE: VW Group - Decision Information for Audi A6/A7 3.0L

Hello Jim,

FYI I sent a request for certificate today for this test group (DADXJ03.03UF) with new evaporative family DADXR0140C7B. For this running change, I also submitted a revised initial application with the running change letters and other data (CSI, etc.) updated.

Please review and let us know if you have questions to issue the certificate.

Note – please cc Bill on any messages tomorrow as I will be out of the office Friday.

Thanks,

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, June 06, 2012 4:22 PM  
To: Giles, Michael (EEO)  
Subject: RE: VW Group - Decision Information for Audi A6/A7 3.0L

Thanks for the clarification.

Yes, I thought I had sent you a confirmation earlier regarding the cycles but I guess I hadn't sent it.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 06/06/2012 04:17 PM  
Subject: RE: VW Group - Decision Information for Audi A6/A7 3.0L

I will try to get the letter to you by tomorrow morning.

The main difference is that the vehicles now have start/stop. Comparing to MY2012, there is also a new engine code, which likely reflects a software change. I will ask though and forward a more detailed answer.

Regarding fuel economy:

For the A6: Compared to MY 2012, My 2013 was slightly worse for city, and 1 mpg better on highway.

For the A7: Compared to MY 2012, the MY2013 is slightly worse for both city and highway.

Also, per our recent agreement with Dave Good, we plan to average start / stop results only for the FTP and US06 tests. For the other tests (Hwy, SC03, Cold CO) we will use inactive configurations only for FE because Start-Stop mode has no effect.

Thanks  
Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, June 06, 2012 3:52 PM  
To: Giles, Michael (EEO)  
Subject: Re: VW Group - Decision Information for Audi A6/A7 3.0L

When can I see the running change letter? Can you tell me what the changes are? Does it have higher FE?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/06/2012 02:52 PM  
Subject: VW Group - Decision Information for Audi A6/A7 3.0L

Hello Jim,

I have recently submitted decision information requests for 2 vehicles (A6 and A7) for Audi test group DADXJ03.03UF.

Some details:

- These vehicles are FEDV's and will support a running change letter which is on the way.

- The vehicles have stop/start as you should recall. We submitted tests under 4 configurations (see table below)
- Configuration 2 also has evaporative tests which support a new evaporative family. This new family with "B" suffix is similar to the existing "A" suffix but with a 5 gram bleed canister.
- The vehicles all had high FE and will require mfr. re-tests if they are not selected by EPA.

Vehicle ID: D3UF-CAQ

Conf.	Model	Stop-Start	Other
0	A6	Active	
1	A6	In-Active	
2	A6	Active	* Evap tests for cfg #2
3	A6	In-Active	

Please contact me if you have any questions about this.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Wed 6/13/2012 5:43:47 PM  
**Subject:** Test data for in-use vehicle R136-0014  
R136RXX-0014.pdf

Hi, Sebastian.

The data for the above vehicle is attached. Please give me a call if you have any questions.

Regards,


Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

# Variable Temperature SHED Report

## Test: 72 °F - 96 °F for 48 Hours

Test No: 2012-0218-004

Mfr: 00590 VID: R136RXX-0014 Config: 00

Test Purpose	22	VTSHED#	VT2
Test Procedure	23	SHED Net Volume, m^3	68.524
Fuel Type	61 Tier 2 Cert Test Fue	Requester	L. SOHACKI
Technician_Name	meador	Validators Initials	

### DIURNAL AND TOTAL EVAPORATIVE EMISSIONS

Started (D@T)	06/06/2012 @ 14:26	Finished (D@T)	06/08/2012 @ 14:26
Start Temp (°F)	72.00	Test Length (hrs)	48
Day 1 Total (gHC)	0.289351	Diurnal (gHC)	0.289351
Day 2 Total (gHC)	0.221909	Hot_Soak_HC_(g)	0.037542
Day 3 Total (gHC)	0	Total Emissions (gHC)	<b>0.326893</b>


### DIURNAL EVAPORATIVE EMISSION DETAILS

T_i (°C)	22.21	Pb_i (kPa)	98.771
Chc_i (ppmC)	3.15	Mhc_i (gms)	0.123865
Mhc_in_i (gms)	0	Mhc_out_i (gms)	0
Sample TS i	2012/06/06 @ 14:26		
T_24 (°C)	22.23	Pb_24 (kPa)	98.841
Chc_24 (ppmC)	10.41	Mhc_24 (gms)	0.413216
Mhc_in_24 (gms)	0.005239	Mhc_out_24 (gms)	0.008853
Sample TS 24	2012/06/07 @ 14:26	Mhc_24 - Mhc_i (gms)	0.289351
T_48 (°C)	22.17	Pb_48 (kPa)	98.626
Chc_48 (ppmC)	15.659999	Mhc_48 (gms)	0.635126
Mhc_in_48 (gms)	0.010109	Mhc_out_48 (gms)	0.030259
Sample TS 48	2012/06/08 @ 14:26	Mhc_48 - Mhc_24 (gms)	0.221909


FTP TID: 002 - Hot Soak TID: 002

**QC Note: All Automated Quality Checks Passed**

cert

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results							
Test Number: 2012-0218-002		Vehicle ID: R136RXX-0014					
	Test Date: 6/5/2012		MFR Name: VOLKSWAGEN				
	Key Start / Hot Soak: 13:15:21 / 09:38		MFR Codes: 590 VWX				
	Fuel Container ID: F00023		Config #: 00				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO				
	Test Procedure: 21 Fed Fuel 2-day Exhaust (CAN LOAD)(ftp)		Shift Schedule: A09980005				
	Calculation Method: Gasoline		Beginning Odometer: 028887.0 MI				
	Pretest Remarks:		Drive Schedule: ftp3bag				
		Soak Period: 21.4 hours					
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	7.589	68.280	0.392	0.845	2.410		
Ambient	3.200	0.390	0.016	0.043	1.906		
Net Concentration	4.592	67.915	0.377	0.805	0.625	3.906	
Remarks:							
<b>Phase 2</b>							
Sample	3.265	5.729	0.045	0.546	1.850		
Ambient	3.256	0.372	0.009	0.042	1.890		
Net Concentration	0.142	5.373	0.036	0.506	0.038	0.100	
Remarks:							
<b>Phase 3</b>							
Sample	3.259	7.175	0.060	0.733	1.939		
Ambient	3.099	0.614	0.016	0.043	1.902		
Net Concentration	0.330	6.594	0.045	0.692	0.141	0.176	
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks: This test has SHED results. SHED Test Number = 2012-0218-002							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.068	2.020	0.017	376.0	0.011	0.058	23.525
Phase 2	0.003	0.255	0.003	377.1	0.001	0.002	23.641
Phase 3	0.005	0.195	0.002	322.0	0.002	0.003	27.688
Weighted	0.01708	0.60445	0.00534	361.751	0.00340	0.01386	
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>				<u>Dyno Settings</u>		Dyno #: D002
Phase 1	23.47						Inertia: 3625
Phase 2	23.59						EPA Set Co A: 11.46
Phase 3	27.62						EPA Set Co B: 0.1076
							EPA Set Co C: 0.01864
Weighted	24.53						Emiss-Bench: D002
<div style="display: flex; justify-content: space-between;"> <span>v120518 - d002 EPAVDAEm120605130311</span> <span>Page 1 of 2</span> <span>Print Time 12-Jun-2012 16:04</span> </div>							



NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results							
Test Number: 2012-0218-002				Vehicle ID: R136RXX-0014			
<b>Results</b> 	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	1.098
	Phase 1	0.243	7.250	0.060	1349.7	0.038	0.207
	Phase 2	0.013	0.983	0.010	1454.0	0.004	0.009
	Phase 3	0.017	0.702	0.007	1156.7	0.009	0.009
<b>Test Conditions</b>		<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>		
Barometer (inHg)		29.05	29.05	29.05			
Avg Cell Temp (degF)		75.04	75.02	75.18			
Dew Point (degF)		49.19	49.17	49.09			
Specific Humidity (grains/lbm)		53.51	53.48	53.31			
NOx Corr Factor		0.9083	0.9081	0.9075			
CO2 Dilution Factor		15.723	24.492	18.257			
CFV Vmix (scf @68F)		3237.66	5550.02	3227.07			
CVS Flow Rate Avg (scfm)		383.46	382.67	382.58			
Fan Placement: One Fan - Up - Front							
Phase Time (secs)		506.60	870.20	506.10			
Distance (miles)		3.590	3.855	3.592			
Bag Analysis Time (secs)		79.0	74.0	76.0			


v120518 - d002


EPAVDAEm120605130311

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Cert

NVFEL Laboratory Test Data						CVS	
Final Laboratory Test Results							
		Test Number: 2012-0218-006		Vehicle ID: R136RXX-0014			
		Test Date: 6/11/2012		MFR Name: VOLKSWAGEN			
		Key Start: 14:15:42		MFR Codes: 590 VWX			
		Fuel Container ID: F00023		Config #: 00			
		Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO			
Test Procedure: 90 US06 (us06warmup_us06)		Shift Schedule: A09980041					
Calculation Method: Gasoline		Beginning Odometer: 028919.0 MI					
Pretest Remarks:		Drive Schedule: us06_us06					
<hr/>							
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	3.581	50.862	0.269	1.004	2.081		
Ambient	2.617	1.037	0.024	0.049	1.950		
Net Concentration	1.162	49.903	0.246	0.958	0.278	0.857	
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<hr/>							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.013	1.123	0.008	338.7	0.004	0.010	26.213
<hr/>							
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>	<u>Dyno Settings</u>			<u>Dyno #:</u>		
Phase 1	26.15				D002		
					Inertia: 3625		
					EPA Set Co A: 11.46		
					EPA Set Co B: 0.1076		
					EPA Set Co C: 0.01864		
					Emiss-Bench: D002		
<hr/>							
v120518 - d002		EPAVDAEm120611134448		Page 1 of 2		Print Time 12-Jun-2012 16:05	

NVFEL Laboratory Test Data							CVS	
Final Laboratory Test Results								
Test Number: 2012-0218-006				Vehicle ID: R136RXX-0014				
	<b>Results</b>	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>
		(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	
	Phase 1	0.103	8.971	0.067	2706.3	0.029	0.076	1.098
<b>Test Conditions</b>								
		<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>			
	Barometer (inHg)	28.96						
	Avg Cell Temp (degF)	75.20						
	Dew Point (degF)	50.14						
	Specific Humidity (grains/lbm)	55.65						
	NOx Corr Factor	0.9166						
	CO2 Dilution Factor	13.278						
	CFV Vmix (scf @68F)	5452.55						
	CVS Flow Rate Avg (scfm)	543.62						
	Fan Placement: USO6 Only - One Large Fan - Up - Front							
	Phase Time (secs)	601.81						
	Distance (miles)	7.991						
	Bag Analysis Time (secs)	75.1						

Cert

NVFEL Laboratory Test Data						CVS	
Final Laboratory Test Results							
Test Number: 2012-0218-005		Test Date: 6/11/2012		Vehicle ID: R136RXX-0014			
Key Start: 13:19:08		Fuel Container ID: F00023		MFR Name: VOLKSWAGEN		MFR Codes: 590 VWX	
Fuel Type: 61 Tier 2 Cert Test Fuel		Test Procedure: 03 HWFET (hwfetestprep_hwfet)		Config #: 00		Transmission: AUTO	
Calculation Method: Gasoline		Pretest Remarks:		Shift Schedule: A09980011		Beginning Odometer: 028898.0 MI	
Drive Schedule: hwfetest_hwfet							
<b>Test Information</b>							
							
<b>Bag Data</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample		3.222	29.052	0.423	1.510	2.001	
Ambient		2.624	0.482	0.013	0.045	1.917	
Net Concentration		0.895	28.624	0.412	1.470	0.300	0.565
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
Phase 1		0.004	0.282	0.006	227.5	0.002	0.003
							Vol MPG
							(mpg)
							39.153
<b>Fuel Economy</b>							
		<u>Gasoline MPG</u>			<u>Dyno Settings</u>		
Phase 1		39.06			Dyno #: D002		
					Inertia: 3625		
					EPA Set Co A: 11.46		
					EPA Set Co B: 0.1076		
					EPA Set Co C: 0.01864		
					Emiss-Bench: D002		
<div style="display: flex; justify-content: space-between;"> <span>v120518 - d002 EPAVDAEm120611125034</span> <span>Page 1 of 2</span> <span>Print Time 12-Jun-2012 16:04</span> </div>							

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results

Test Number: 2012-0218-005

Vehicle ID: R136RXX-0014

### Results



	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.045	2.897	0.063	2338.2	0.017	0.028	1.098

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.98			
Avg Cell Temp (degF)	75.09			
Dew Point (degF)	49.98			
Specific Humidity (grains/lbm)	55.27			
NOx Corr Factor	0.9151			
CO2 Dilution Factor	8.858			
CFV Vmix (scf @68F)	3070.03			
CVS Flow Rate Avg (scfm)	240.79			
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	765.00			
Distance (miles)	10.278			
Bag Analysis Time (secs)	76.9			

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 6/13/2012 7:41:41 PM  
**Subject:** VW Group - Request for Certificate DVWXV02.0U5N

Hello Jim,

Today we submitted the application and request for certificate for Volkswagen carryover test group DVWXV02.0U5N. This test group is the one featuring the 2.0L TDI without SCR (Jetta, Audi A3, SportWagen).

This test group is carryover but includes two new models introduced as FEDV's (Beetle, Beetle Convertible).

We would like to request that this be high priority for VW group due to sales volume and timing. Please let me know if you have any questions.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 6/13/2012 9:34:54 PM  
**Subject:** Re: VW Group - Request for Certificate DVWXV02.0U5N

As of 5:30, The only new request today was DAD XV02.03UB .

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/13/2012 03:41 PM  
Subject: VW Group - Request for Certificate DVWXV02.0U5N

Hello Jim,

Today we submitted the application and request for certificate for Volkswagen carryover test group DVWXV02.0U5N. This test group is the one featuring the 2.0L TDI without SCR (Jetta, Audi A3, SportWagen).

This test group is carryover but includes two new models introduced as FEDV's (Beetle, Beetle Convertible).

We would like to request that this be high priority for VW group due to sales volume and timing. Please let me know if you have any questions.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 6/14/2012 12:32:31 PM  
**Subject:** VW Group - Revised Certificate needed DADXT03.02UG

Hi Jim,

I submitted a Certificate Lock request that requires a revised Certificate as the result of Verify Rel. 10 FE Program changes. We had to change the Mfr. Code to VWX, Div. 1, in the models covered section. It's something I missed when I recent submitted this to you. Sorry about that.

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 6/14/2012 12:44:45 PM  
**Subject:** VW Group - Audi Certificate request for DADXV05.2LR8

Jim,

Just FYI, the pending Certificate Request for test group DADXV05.2LR8 submitted Tuesday is another one where we had to make a change to the Mfr. Code to satisfy the Verify FE program Release 10.

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Joel Ball/AA/USEPA/US@EPA;"Berenz, Sebastian (EEO)"  
[Sebastian.Berenz@vw.com]; Berenz, Sebastian (EEO)"  
[Sebastian.Berenz@vw.com]  
**From:** [Ex. 7]  
**Sent:** Thur 6/14/2012 5:38:49 PM  
**Subject:** RE: IUVP High Mileage Program MY2007  
[ball.joel@epa.gov](mailto:ball.joel@epa.gov)  
[Sebastian.Berenz@vw.com](mailto:Sebastian.Berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>

Hi Sebastian,

ARB is ok with your plan.

**Ex. 7**

From: Joel Ball [mailto:Ball.Joel@epamail.epa.gov]  
Sent: Thursday, June 14, 2012 10:37 AM  
To: Berenz, Sebastian (EEO)  
Cc: [Ex. 7]  
Subject: Re: IUVP High Mileage Program MY2007

Hi Sebastian,

Your plan is acceptable to EPA. Please confirm with J. [Ex. 7] from ARB as well.

Joel Ball  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4238  
[ball.joel@epa.gov](mailto:ball.joel@epa.gov)

From: "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
To: Joel Ball/AA/USEPA/US@EPA  
Date: 06/14/2012 09:57 AM  
Subject: IUVP High Mileage Program MY2007

Hello Mr. Ball,

We are about to finish our MY2007 high mileage program and we find one big problem to procure the 75% of the useful life vehicle.

- 7VWXT03.6276
- Touareg/Q7
- 20229 vehicles sold
- 3.6L / VR6 (FSI) 276 hp / 280 hp
- LEVII/Bin5
- 75% useful life: 90.000mi

The vehicle should have 90.000mi or more. The closest vehicle we can find in Michigan and/or California is 85.000mi though 400 letters to customers.

I would like to bring the vehicle in this week, in order to stay in the time schedule.

I will proceed that way unless instructed otherwise from you.

Thank you very much.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 6/14/2012 7:03:35 PM  
**Subject:** RE: VW Group - Request for Certificate DVWXV02.0U5N  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hi Jim,

Thanks for the notice, some issues caused my original cert request to be rejected (see below).

As it turns out, I was forced to make minor corrections to the DF values in the CSI. These values are now identical to previous years (a data communication error caused the wrong values in the original version). I have submitted the corrected application (R01) and received an cert request (accepted by verify, so you should also have it) /

Just a reminder this is rather high priority for us, so any assistance you can provide on this one would be appreciated.

Regards,

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, June 13, 2012 5:35 PM  
To: Giles, Michael (EEO)  
Subject: Re: VW Group - Request for Certificate DVWXV02.0U5N

As of 5:30, The only new request today was DADXV02.03UB .

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/13/2012 03:41 PM  
Subject: VW Group - Request for Certificate DVWXV02.0U5N

Hello Jim,

Today we submitted the application and request for certificate for Volkswagen carryover test group DVWXV02.0U5N. This test group is the one featuring the 2.0L TDI without SCR (Jetta, Audi A3, SportWagen).

This test group is carryover but includes two new models introduced as FEDV's (Beetle, Beetle Convertible).

We would like to request that this be high priority for VW group due to sales volume and timing. Please let me know if you have any questions.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 6/15/2012 12:45:45 PM  
**Subject:** VW Group - Decision Information

Hello Jim,

This morning we sent decision information requests for the new FEDV Beetle models which will be included in the 2.0L TDI test group DVWXV02.05UN for MY 2013.

Please advise of your decision at your earliest convenience.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** CN=David Good/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** Ex. 7 @vw.com]; Ex. 7  
Ex. 7 @vw.com]  
**Bcc:** []  
**From:** Ex. 7  
**Sent:** Fri 6/15/2012 2:29:06 PM  
**Subject:** RE: 2013 light-duty Greenhouse gas - 2013 PreMY report questions & potential errors

[attachment "winmail.dat" deleted by David Good/AA/USEPA/US]  
[attachment "2013 Pre MY Report.pdf" deleted by David Good/AA/USEPA/US]  
[attachment "message\_body.rtf" deleted by David Good/AA/USEPA/US]  
Dave

Attached are updated documents that address the issues identified within you most recent email. In addition I have included responses to the each of the identified issues in red below. Furthermore a statement has been included that address the uncertainty associated with Porsche. Please let me know if there are any additional questions. Thanks!

1. Potential error in your fleet average calculations: Using the projected CREE fleet average estimates and CREE standards listed in your (attached) 2013 Pre-MY report spreadsheet, I come up with slightly different results for the total "Model Year Credits (Debits)" fields for car and trucks for 2012-2015 model years. For example, my calculations for 2013-2015 model year result in the following credit (Megagram) values:

Category	D.Good CREE Calcs	VW CREE values	Comments
2013 Pass Car	(730,335)	(778,903)	
2013 Light Truck	87,527	87,527	
agrees with VW			
2014 Pass Car	(79,674)	(91,543)	
2014 Light Truck	(16,902)	(17,244)	
2015 Pass Car	(424,806)	(395,074)	
2015 Light Truck	(272,380)	(275,812)	

My calculations, for example, for 2013 cars are  $[(258 - 269)(550,837)(195,264)/1,000,000] - 404,242 \text{ (A/C credits)} = 778,903$  credits. It looks like your calculations are not rounding the CREE standards and fleet average CREE values to the nearest whole gram/mile, as required by EPA regulations.

Please advise.

Attached are updated documents where CREE Fleet Average estimates have been corrected by using the appropriate rounding technique.

2. Standards Calculator - Potential error in projected production volume: The projected production volume values listed in the 2013-2015 Standards calculator spreadsheets don't agree with the projected production volume listed in the 2013-2015 fleet average spreadsheets. For example the 2013 car production volume is listed as 565,654 in the 2013 car standards calculator but 550,837 in the 2013 car fleet average spreadsheet. Also, please note that a standards calculator spreadsheet was not included in your Pre-MY report for 2013 model year trucks.

Please advise.

EPA Calculator documents have been updated to correct errors in projected planning volumes. Planning volumes are now aligned throughout the report MY 2013 – 2015.

3. Bugatti: Bugati models appear to be missing in your 2013-2015 templates.

Please advise

Bugatti planning volumes not available.

4. Three AB&T Spreadsheets: Your report contains three AB&T spreadsheets. None of them include projections for 2014 or 2015 model year credits. Please combine the three spreadsheets into one AB&T spreadsheet which includes a listing for 2014 and 2015 credits.

Please advise.

AB&T spreadsheet has been updated with MY 2013 – 2015 appearing on 1 spreadsheet as requested.

5. A/C Leakage and Efficiency Credits: Your 2013 Pre-MY report doesn't contain any details of how the A/C credits were generated for each model. Please provide a little more detail about how the A/C leakage and A/C efficiency credits will be generated for 2012 and 2013 model year vehicles, and (if possible) 2014 and 2015 model year vehicles---similar to the level of detail provided in the EPA templates available at <http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>.

Please advise.

Support documentation has been provided that demonstrates how credits were generated for each model.

6. Possible Merger of VW and Porsche: Over the past year, there have been some articles in the press about a potential merger of VW & Porsche. If possible, please provide a brief summary of the status of that possible merger and any potential effects on VW's 2013 GHG compliance plans.

"On September 8, 2011, Volkswagen AG announced that the planned merger with Porsche Automobile Holding SE (Porsche SE) cannot be implemented within the time frame laid down in the Comprehensive Agreement. The decision was reached by the Board of Management of Volkswagen AG following discussions with Porsche SE. Nevertheless, all parties remain committed to the goal of creating an integrated automotive group with Porsche and are convinced that they will succeed in doing so.

The existing legal hurdles, and particularly those resulting from the ongoing proceedings and actions against Porsche SE in Germany and the USA due to alleged market manipulation, made it impossible from Volkswagen's perspective to quantify the economic risks and hence to arrive at a valuation for Porsche SE that could be used to determine the exchange ratio.

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# Ex. 7

-----Original Message-----

From: David Good [mailto:Good.David@epamail.epa.gov]

Sent: Monday, June 11, 2012 12:58 PM

To: [Ex. 7]@vw.com

Cc: Roberts French; Tom Anderson; Linc Wehrly; [Ex. 7] [Ex. 7]

Subject: 2013 light-duty Greenhouse gas - 2013 PreMY report questions & potential errors

WARNING!!! (from amgwyin01.vwoa.na.vwg)

The following message attachments were flagged by the antivirus scanner:

Attachment [2.2] VW-PreMY Rpt-CBI\_DVWXV\_COMMON\_CR1\_CAR\_R02[1]-from Verify-4-20-2012.zip, scan failed:  
File encrypted. Action taken: incomplete scan

Please contact the Help Desk at x44800 with any questions.

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Fri 6/15/2012 6:13:59 PM  
**Subject:** Verify Question

Jim,

I revised the Initial Application for the test group DVWXJ02.03UA to reflect new tests we submitted representing new calibration for Start of Production on the worst case vehicle (Tiguan 4Motion automatic). My question is, do we need a revised Certificate if we already have one based on carryover data from 2012 model year? the Carline already exists on the Certificate and the tests were all waived.

Thanks

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Fri 6/15/2012 7:21:04 PM  
**Subject:** Re: Verify Question

If the new data was waived and the Part 1 was revised with the new CSI emission data then I think you are done since the certificate is unchanged.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**Date:** 06/15/2012 02:14 PM  
**Subject:** Verify Question

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(248) 754-4219  
william.rodgers@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 6/18/2012 11:02:23 AM  
**Subject:** RE: Verify Question  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Thanks Jim.

That was my thought as well, just making sure. Yes, the Application was revised with the new worst case data in the CSI.

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Friday, June 15, 2012 3:21 PM  
To: Rodgers, William (EEO)  
Subject: Re: Verify Question

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william.rodgers@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 6/18/2012 1:22:26 PM  
**Subject:** RE: VW Group - Decision Information

Hello Jim,

I have submitted the supplemental information for the vehicle selected for testing (Beetle Convertible Automatic):

Vehicle ID: VW324 10220/13

Vehicle Configuration #: 0

Test Group Name: DVWXV02.0U5N

Please let me know the test date when it is set on your end.

Thanks,

Mike

From: Giles, Michael (EEO)  
Sent: Friday, June 15, 2012 8:46 AM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov)  
Cc: Rodgers, William  
Subject: VW Group - Decision Information

Hello Jim,

This morning we sent decision information requests for the new FEDV Beetle models which will be included in the 2.0L TDI test group DVWXV02.05UN for MY 2013.

Please advise of your decision at your earliest convenience.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207





was not included in your Pre-MY report for 2013 model year trucks.

Please advise.

EPA Calculator documents have been updated to correct errors in projected planning volumes. Planning volumes are now aligned throughout the report MY 2013 – 2015.

3. Bugatti: Bugati models appear to be missing in your 2013-2015 templates.

Please advise

Bugatti planning volumes not available.

4. Three AB&T Spreadsheets: Your report contains three AB&T spreadsheets. None of them include projections for 2014 or 2015 model year credits. Please combine the three spreadsheets into one AB&T spreadsheet which includes a listing for 2014 and 2015 credits.

Please advise.

AB&T spreadsheet has been updated with MY 2013 – 2015 appearing on 1 spreadsheet as requested.

5. A/C Leakage and Efficiency Credits: Your 2013 Pre-MY report doesn't contain any details of how the A/C credits were generated for each model. Please provide a little more detail about how the A/C leakage and A/C efficiency credits will be generated for 2012 and 2013 model year vehicles, and (if possible) 2014 and 2015 model year vehicles---similar to the level of detail provided in the EPA templates available at <http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>.

Please advise.

Support documentation has been provided that demonstrates how credits were generated for each model.

6. Possible Merger of VW and Porsche: Over the past year, there have been some articles in the press about a potential merger of VW & Porsche. If possible, please provide a brief summary of the status of that possible merger and any potential effects on VW's 2013 GHG compliance plans.

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**Ex. 7**

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Mon 6/18/2012 2:54:39 PM  
**Subject:** 2013 Lamborghini Fuel Economy Label

Hello Jim;

Thank you for taking care of the reissue of the Audi 5.2L test group certificate last Friday, so I was able to process the Lamborghini Gallardo fuel economy label today. Four Gallardo labels were finally accepted by Verify.

Best regards,

Richard

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 6/19/2012 7:43:27 PM  
**Subject:** VW Group - Decision Info 1.4L Jetta Hybrid

Hello Jim,

I just submitted a decision request for the new 1.4L Jetta Hybrid (1.4L), for test group DVXXV01.4PHE.

This vehicle has new technology all around (engine, evaporative family, OBD system, ORVR system). Our understanding is that EPA will most likely want to do confirmatory tests.

Please let me know if you have any questions processing this request.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 6/19/2012 8:32:41 PM  
**Subject:** Re: VW Group - Decision Info 1.4L Jetta Hybrid

Is this a plug-in hybrid? When will it be available for testing?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/19/2012 03:45 PM  
Subject: VW Group - Decision Info 1.4L Jetta Hybrid

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Thanks,  
Mike

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United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 6/19/2012 8:36:54 PM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

No plug in, I believe it is a standard "HEV" because there is no outside power source other than the fuel.

The available date is September 17th.

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, June 19, 2012 4:33 PM  
To: Giles, Michael (EEO)  
Cc: Rodgers, William (EEO)  
Subject: Re: VW Group - Decision Info 1.4L Jetta Hybrid

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[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>  
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**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 6/19/2012 8:46:08 PM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Are you positive? The cert preview document lists this vehicle and test group as a 1.4L TFSI with plug-in hybrid technology. Did they change it since October?

Jim Snyder  
Light-Duty Vehicle Group  
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(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 06/19/2012 04:38 PM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid

No plug in, I believe it is a standard "HEV" because there is no outside power source other than the fuel.

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**From:** Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
**Sent:** Tuesday, June 19, 2012 4:33 PM  
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**Subject:** Re: VW Group - Decision Info 1.4L Jetta Hybrid

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**Cc:** []  
**Bcc:** []  
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**Sent:** Tue 6/19/2012 9:29:27 PM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Is there another EDV car coming? Its a new evap group and I don't see any evap tests submitted.

Jim Snyder  
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**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 6/20/2012 12:07:16 PM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
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**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
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[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

On page 2 and page 6 it mentions a 1.4L TFSI plug-in hybrid Jetta. It doesn't specify the test group # on those pages but I see no other on the chart.

Jim Snyder

Light-Duty Vehicle Group

Compliance Division

United States Environmental Protection Agency

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**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
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**To:** Giles, Michael (EEO)  
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From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, June 19, 2012 4:33 PM  
To: Giles, Michael (EEO)  
Cc: Rodgers, William (EEO)  
Subject: Re: VW Group - Decision Info 1.4L Jetta Hybrid

Is this a plug-in hybrid? When will it be available for testing?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

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Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

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**From:** "Rodgers, William (EEO)"  
**Sent:** Wed 6/20/2012 12:26:35 PM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Snyder.Jim@epamail.epa.gov>  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
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Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

From: Giles, Michael (EEO)  
Sent: Wednesday, June 20, 2012 8:07 AM  
To: Jim Snyder  
Cc: Rodgers, William (EEO)  
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**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 6/20/2012 12:32:54 PM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[mailto:Snyder.Jim@epamail.epa.gov](mailto:mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Okay, I suspected it was something like that but wanted to find out if they were more than one version coming.

What about the evaporative tests? I don't see any. Is there another EDV coming?

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(734) 214-4946  
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**To:** "Giles, Michael (EEO)" <michael.giles@vw.com>, Jim Snyder/AA/USEPA/US@EPA  
**Date:** 06/20/2012 08:27 AM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid

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[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
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[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hi Jim,

The decision information for the Jetta Hybrid has been corrected to include the evaporative tests, as well as 3 additional supporting FTP tests.

Sorry about the omission, I was under the idea that the d.i. was relevant only for exhaust tests.

Regards,

Mike

From: Giles, Michael (EEO)  
Sent: Wednesday, June 20, 2012 8:56 AM  
To: 'Jim Snyder'  
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FAX +1-248-754-4207

**To:** richard.thomas@vw.com[]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Wed 6/20/2012 5:32:45 PM  
**Subject:** re: 2013 FE Guide - data in Verify as of 6/15/2012 attached; some have errors  
VW Group-2013 FE Guide-rel10-all-rel-dates-no-sales-6-15-2012.xlsx

Richard,

Attached is a spreadsheet with all the 2013 FE Label data in Verify as of 6/15/2012.

The data highlighted in green have errors. Please correct the errors when you get a chance.

Note that I'm still sending releasable error-free data to DOE for posting on [www.fueleconomy.gov](http://www.fueleconomy.gov) on the 1st and 15th of the month.

Thanks

EPA comment	VERIFY	Model	Mfr Name (blue)	Division	Carline	Verif	Index (Eng)
		2013	Audi	Audi	A3	ADX	59 2.0
		2013	Audi	Audi	A3	ADX	58 2.0
Error- hatch	Y	2013	Audi	Audi	A3 quattro	ADX	60 2.0
Error in Tran	Y	2013	Audi	Audi	A4	ADX	35 2.0
Error -- gas c	Y	2013	Audi	Audi	A4 quattro	ADX	37 2.0
		2013	Audi	Audi	A4 quattro	ADX	40 2.0
Error in Tran	Y	2013	Audi	Audi	A5 Cabriolet	ADX	36 2.0
Error -- gas c	Y	2013	Audi	Audi	A5 Cabriolet quattro	ADX	39 2.0
Error -- gas c	Y	2013	Audi	Audi	A5 quattro	ADX	38 2.0
		2013	Audi	Audi	A5 quattro	ADX	41 2.0
Error in Tran	Y	2013	Audi	Audi	A6	ADX	65 2.0
		2013	Audi	Audi	A8	ADX	128 3.0
		2013	Audi	Audi	A8L	ADX	129 3.0
		2013	Audi	Audi	A8L	ADX	109 6.3
Error in com	Y	2013	Audi	Audi	allroad quattro	ADX	134 2.0
		2013	Audi	Audi	Q7	ADX	61 3.0
Diesel;		2013	Audi	Audi	Q7	ADX	53 3.0
		2013	Audi	Audi	RS5	ADX	49 4.2
Potential err	Y	2013	Audi	Audi	RS5 Cabriolet	ADX	52 4.2
		2013	Audi	Audi	S4	ADX	42 3.0
		2013	Audi	Audi	S4	ADX	45 3.0
		2013	Audi	Audi	S5	ADX	43 3.0
		2013	Audi	Audi	S5	ADX	46 3.0
		2013	Audi	Audi	S5 Cabriolet quattro	ADX	44 3.0
		2013	Audi	Audi	S6	ADX	48 4.0
		2013	Audi	Audi	S7	ADX	47 4.0
		2013	Audi	Audi	TT Coupe quattro	ADX	66 2.0
		2013	Audi	Audi	TT Roadster quattro	ADX	67 2.0
		2013	Audi	Audi	TTRS Coupe	ADX	69 2.5
		2013	Bentley	Bentley Motors	L'Continental Flying Spur	BEX	110 6.0
		2013	Bentley	Bentley Motors	L'Continental GT	BEX	108 4.0
		2013	Bentley	Bentley Motors	L'Continental GT	BEX	113 6.0
		2013	Bentley	Bentley Motors	L'Continental GTC	BEX	107 4.0
		2013	Bentley	Bentley Motors	L'Continental GTC	BEX	111 6.0
		2013	Bentley	Bentley Motors	L'Continental Supersports Conv	BEX	112 6.0
		2013	Volkswagen	Volkswagen	BEETLE	VWX	19 2.0
		2013	Volkswagen	Volkswagen	BEETLE	VWX	17 2.5
		2013	Volkswagen	Volkswagen	BEETLE	VWX	27 2.5
Error in high	Y	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	VWX	20 2.0
		2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	VWX	18 2.5
		2013	Volkswagen	Volkswagen	CC	VWX	1 2.0
		2013	Volkswagen	Volkswagen	CC	VWX	4 2.0
		2013	Volkswagen	Volkswagen	CC	VWX	2 3.6
		2013	Volkswagen	Volkswagen	CC 4MOTION	VWX	3 3.6
		2013	Volkswagen	Volkswagen	Eos	VWX	21 2.0
		2013	Volkswagen	Volkswagen	GOLF	VWX	16 2.5
		2013	Volkswagen	Volkswagen	GOLF	VWX	26 2.5
		2013	Volkswagen	Volkswagen	Golf R	VWX	57 2.0
		2013	Volkswagen	Volkswagen	GTI	VWX	22 2.0
		2013	Volkswagen	Volkswagen	GTI	VWX	23 2.0
		2013	Volkswagen	Volkswagen	Jetta	VWX	50 2.0
		2013	Volkswagen	Volkswagen	Jetta	VWX	51 2.0



	2013 Volkswagen	Volkswagen	Jetta	VWX	15	2.5
	2013 Volkswagen	Volkswagen	Jetta	VWX	25	2.5
	2013 Volkswagen	Volkswagen	JETTA SPORTWAGEN	VWX	14	2.5
	2013 Volkswagen	Volkswagen	JETTA SPORTWAGEN	VWX	24	2.5
Diesel;	2013 Volkswagen	Volkswagen	Passat	VWX	62	2.0
Diesel;	2013 Volkswagen	Volkswagen	Passat	VWX	64	2.0
	2013 Volkswagen	Volkswagen	Passat	VWX	63	3.6
	2013 Volkswagen	Volkswagen	TIGUAN	VWX	68	2.0
	2013 Volkswagen	Volkswagen	TIGUAN	VWX	56	2.0
	2013 Volkswagen	Volkswagen	TIGUAN 4MOTION	VWX	55	2.0
Diesel;	2013 Volkswagen	Volkswagen	TOUAREG	VWX	54	3.0

City Hwy Cor Low Low Low City Una Hwy Una Comb Ur City Unrd Adj FE - Cor												
4 Auto(AM-S6)	21	28	24			26.6	38.2	30.8102				21.3388
4 Manual(M6)	21	30	24			25.3	40.3	30.3902				20.8146
4 Auto(S6)	20	27	22			27.2	37.1	30.9119				20.891
4 Auto(S6)	20	27	22			30.1185	44.4328	35.2251				23.6355
4 Auto(S8)	20	30	24			25.6856	40.5676	30.7641				20.3576
4 Manual(M6)	22	32	26			27.624	43.9699	33.1736				22.2425
4 Auto(V-S1)	24	31	26			30.1185	44.4328	35.2251				23.6355
4 Auto(S8)	20	30	24			25.6856	40.5676	30.7641				20.3576
4 Auto(S8)	20	30	24			25.6856	40.5676	30.7641				20.3576
4 Manual(M6)	22	32	26			27.624	43.9699	33.1736				22.2425
4 Auto(V-S1)	25	33	28			31.4	46.9	36.8857				24.5044
6 Auto(S8)	18	28	21			22.1698	36.6499	26.9637				17.7044
6 Auto(S8)	18	28	21			22.1698	36.6499	26.9637				17.7044
12 Auto(S8)	13	21	16			15.9	25.7	19.1935				13.1387
4 Auto(S8)	20	27	22			25.2	37.3	29.5075				19.9584
6 Auto(S8)	16	22	18			19.2813	29.852	22.9361				15.522
6 Auto(S8)	19	28	22			22.8	39.1	28.0649				18.74
8 Auto(AM-S7)	16	23	18			19.1	30	22.8332				15.7409
8 Auto(AM-S7)	16	22	18			19.2	28.9	22.6159				15.8793
6 Auto(AM-S7)	18	28	21			22.4	35.8	26.9372				18.117
6 Manual(M6)	17	26	20			18.9	33.4	23.4887				17.0438
6 Auto(AM-S7)	18	28	21			22.4	35.8	26.9372				18.117
6 Manual(M6)	17	26	20			18.9	33.4	23.4887				17.0438
6 Auto(AM-S7)	18	26	21			22.1	34.7	26.4165				17.6699
8 Auto(AM-S7)	17	27	20			20.7539	35.335	25.4866				16.761
8 Auto(AM-S7)	17	27	20			20.7539	35.335	25.4866				16.761
4 Auto(AM-S6)	22	31	26			28.4068	42.2579	33.3217				22.407
4 Auto(AM-S6)	22	31	26			28.4068	42.2579	33.3217				22.407
5 Manual(M6)	18	25	20			21.2	34.2	25.5746				17.751
12 Auto(S6)	11	19	14			13.7	24.6	17.112				11.2476
8 Auto(S8)	15	24	18			19	33.5	23.5959				15.0109
12 Auto(S6)	12	19	14			13.9	24.7	17.3049				11.5043
8 Auto(S8)	14	24	17			17.4	30.8	21.6358				14.0639
12 Auto(S6)	11	19	14			13.7	24.6	17.112				11.2476
12 Auto(S6)	12	19	14			13.9	24.7	17.3049				11.5043
4 Auto(AM-S6)	22	30	25			26.5	42.0656	31.7942				22.0202
5 Auto(S6)	22	29	25			27.3831	39.0128	31.6255				22.2863
5 Manual(M5)	22	31	25			26.4199	42.8586	31.9312				21.7202
4 Auto(S6)	21	27	23			26.8	40.2092	31.532				21.1383
5 Auto(S6)	21	27	23			26.0395	37.7702	30.2701				21.2302
4 Auto(AM-S6)	22	31	25			26.977	42.4936	32.2814				21.8706
4 Manual(M6)	21	32	25			25.7923	44.3415	31.7736				20.9361
6 Auto(S6)	17	27	21			21.2	35.1	25.7972				17.4935
6 Auto(S6)	17	25	20			20.5	33.5	24.8373				16.9415
4 Auto(AM-S6)	22	30	25			27.5	41.5	32.4219				21.7634
5 Auto(S6)	24	31	26			28.0549	42.473	33.1132				23.6446
5 Manual(M5)	23	33	26			26.3044	44.5088	32.2378				22.7343
4 Manual(M6)	19	27	22			23.9	37.1	28.456				19.278
4 Auto(AM-S6)	24	33	27			29.9333	43.5096	34.8229				24.2237
4 Manual(M6)	21	31	25			26.0527	41.2042	31.2185				21.2839
4 Auto(AM-S6)	24	32	27			29.5139	45.1099	34.9517				23.7854
4 Manual(M6)	22	33	26			26.5556	44.9945	32.56				21.8931

5 Auto(S6)	24	31	26	28.0549	42.473	33.1132	23.6446
5 Manual(M5)	23	33	26	26.3044	44.5088	32.2378	22.7343
5 Auto(S6)	24	31	26	28.0549	42.473	33.1132	23.6446
5 Manual(M5)	23	33	26	26.3044	44.5088	32.2378	22.7343
4 Auto(AM-S6)	30	40	34	37.9	56.8	44.5744	30.4633
4 Manual(M6)	31	43	35	38.2	62.8	46.3746	30.8024
6 Auto(AM-S6)	20	28	23	23.9	37.3	28.5088	19.7174
4 Auto(S6)	21	26	23	26.0779	36.3534	29.8782	20.6233
4 Manual(M6)	18	26	21	21.7	35.8	26.3745	18.1488
4 Auto(S6)	20	26	23	25.7924	36.0745	29.5873	20.402
6 Auto(S8)	20	29	23	24.1	22.4	23.3041	19.649

Way	Fuel	Unrd Adj FE - Con	Comb Unrd Adj FE - Con	Guzzler?	Air Aspir Method
-----	------	-------------------	------------------------	----------	------------------

	27.7919		23.8286		TC
	29.9953		24.1394		TC
	28.1035		23.6187		TC
	30.6684		26.3554		TC
	29.8271		23.7508G		TC
	32.0861		25.8049		TC
	30.6684		26.3554		TC
	29.8271		23.7508G		TC
	29.8271		23.7508G		TC
	32.0861		25.8049		TC
	32.5529		27.5721		TC
	27.5645		21.101		SC
	27.5645		21.101		SC
	20.6025		15.6978G		NA
	26.6824		22.5112		TC
	21.5458		17.7559		SC
	27.62		21.9099		TC
	23.3075		18.4339		NA
	22.1836		18.2078		NA
	27.558		21.419		SC
	26.023		20.1767		SC
	27.558		21.419		SC
	26.023		20.1767		SC
	25.953		20.6333		SC
	26.9697		20.2022		TC
	26.9697		20.2022		TC
	31.1674		25.6515		TC
	31.1674		25.6515		TC
	25.2021		20.4751		TC
	18.7327		13.7134G		TC
	24.4645		18.1706		TC
	18.877		13.9574G		TC
	23.9773		17.2766G		TC
	18.7327		13.7134G		TC
	18.877		13.9574G		TC
	29.5574		24.8746		TC
	28.5683		24.7338		NA
	30.6767		25.0054		NA
	28.6751		23.9738		TC
	26.9749		23.4804		NA
	31.0367		25.2227		TC
	31.656		24.7		TC
	26.5716		20.6716		NA
	25.219		19.8774		NA
	30.1121		24.8658		TC
	31.0458		26.486		NA
	32.7402		26.3594		NA
	26.8882		22.0917		TC
	32.5108		27.3624		TC
	30.8324		24.7304		TC
	31.6043		26.7652		TC
	32.6043		25.6912		TC

31.0458	26.486	NA
32.7402	26.3594	NA
31.0458	26.486	NA
32.7402	26.3594	NA
40.2057	34.1916	TC
42.6219	35.1943	TC
27.8048	22.6868	NA
26.0617	22.7606	TC
26.2617	21.0791	TC
25.8545	22.5412	TC
28.9961	22.9829	TC

<b>Air Aspiration Method Desc</b>	<b>Trans</b>	<b>Trans Desc</b>	<b>Trans, Other</b>	<b># Gears</b>
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	SCV	Selectable Continuously Vari		1
Turbocharged	SA	Semi-Automatic		8
Turbocharged	M	Manual		6
Turbocharged	SCV	Selectable Continuously Vari		1
Turbocharged	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		8
Turbocharged	M	Manual		6
Turbocharged	SCV	Selectable Continuously Vari		1
Supercharged	SA	Semi-Automatic		8
Supercharged	SA	Semi-Automatic		8
Naturally Aspirated	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		8
Supercharged	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		8
Naturally Aspirated	AMS	Automated Manual- Selectat		7
Naturally Aspirated	AMS	Automated Manual- Selectat		7
Supercharged	AMS	Automated Manual- Selectat		7
Supercharged	M	Manual		6
Supercharged	AMS	Automated Manual- Selectat		7
Supercharged	M	Manual		6
Supercharged	AMS	Automated Manual- Selectat		7
Turbocharged	AMS	Automated Manual- Selectat		7
Turbocharged	AMS	Automated Manual- Selectat		7
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6
Turbocharged	SA	Semi-Automatic		6
Turbocharged	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		6
Turbocharged	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		6
Turbocharged	SA	Semi-Automatic		6
Turbocharged	AMS	Automated Manual- Selectat		6
Naturally Aspirated	SA	Semi-Automatic		6
Naturally Aspirated	M	Manual		5
Turbocharged	AMS	Automated Manual- Selectat		6
Naturally Aspirated	SA	Semi-Automatic		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6
Naturally Aspirated	SA	Semi-Automatic		6
Naturally Aspirated	SA	Semi-Automatic		6
Turbocharged	AMS	Automated Manual- Selectat		6
Naturally Aspirated	SA	Semi-Automatic		6
Naturally Aspirated	M	Manual		5
Turbocharged	M	Manual		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6

Naturally Aspirated	SA	Semi-Automatic	6
Naturally Aspirated	M	Manual	5
Naturally Aspirated	SA	Semi-Automatic	6
Naturally Aspirated	M	Manual	5
Turbocharged	AMS	Automated Manual- Selectat	6
Turbocharged	M	Manual	6
Naturally Aspirated	AMS	Automated Manual- Selectat	6
Turbocharged	SA	Semi-Automatic	6
Turbocharged	M	Manual	6
Turbocharged	SA	Semi-Automatic	6
Turbocharged	SA	Semi-Automatic	8

2017-FFP 003715



Y	N	F	2-Wheel Drive, Front
N	N	F	2-Wheel Drive, Front
Y	N	F	2-Wheel Drive, Front
N	N	F	2-Wheel Drive, Front
Y	N	F	2-Wheel Drive, Front
N	N	F	2-Wheel Drive, Front
Y	N	F	2-Wheel Drive, Front
Y	N	F	2-Wheel Drive, Front
N	N	F	2-Wheel Drive, Front
Y	N	A	All Wheel Drive
Y	N	A	All Wheel Drive

Primary Basic Engine/Testgroup	Max Ethar	Max Biodie	Range1 - Moc	Fuel Usage
DADXV02.03PA	10			GP
DADXV02.03PA	10			GP
DADXV02.03UA	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DVWXV06.3UA8	10			GP
DADXV02.03UB	10			GP
DADXT03.0TLF	10			GP
DADXT03.03UG		5		DU
DADXV04.23UL	10			GP
DADXV04.23UL	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DADXV04.03UJ	10			GP
DADXV04.03UJ	10			GP
DADXV02.03UA	10			GP
DADXV02.03UA	10			GP
DADXV02.53UK	10			GP
DBEXV06.0501	85	333		GP
DADXV04.03UJ	10			GP
DBEXV06.0501	85	333		GP
DADXV04.03UJ	10			GP
DBEXV06.0501	85	333		GP
DBEXV06.0501	85	333		GP
DVWXJ02.03UA	10			GP
DVWXV02.5U3A	10			G
DVWXV02.5U3M	10			G
DVWXJ02.03UA	10			GP
DVWXV02.5U3A	10			G
DVWXJ02.03UA	10			GP
DVWXJ02.03UA	10			GP
DVWXV03.6U46	10			GP
DVWXV03.6U46	10			GP
DVWXV02.03SA	10			GP
DVWXV02.5U3A	10			G
DVWXV02.5U3M	10			G
DADXV02.03UA	10			GP
DADXV02.03UA	10			GP
DADXV02.03UA	10			GP
DVWXJ02.03UA	10			GP
DVWXJ02.03UA	10			GP

DVWXV02.5U3A	10		G
DVWXV02.5U3M	10		G
DVWXV02.5U3A	10		G
DVWXV02.5U3M	10		G
DVWXV02.0U4S		5	DU
DVWXV02.0U4S		5	DU
DVWXV03.6U41	10		GP
DVWXJ02.03UA	10		GP
DVWXJ02.03UA	10		GP
DVWXJ02.03UA	10		GP
DADXT03.02UG		5	DU

[illegible]

Gasoline (Regular Unleaded Recommended)	MPG	miles per gallon
Gasoline (Regular Unleaded Recommended)	MPG	miles per gallon
Gasoline (Regular Unleaded Recommended)	MPG	miles per gallon
Gasoline (Regular Unleaded Recommended)	MPG	miles per gallon
Diesel, ultra low sulfur (15 ppm, maximum)	MPG	miles per gallon
Diesel, ultra low sulfur (15 ppm, maximum)	MPG	miles per gallon
Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
Diesel, ultra low sulfur (15 ppm, maximum)	MPG	miles per gallon

Gas Guzzler Exempt ( Gas Guzzler Ex2Dr Pass Vol 2Dr Lugg Vol 4Dr Pass Vol 4Dr Lugg Vol				
N	Not exempt	89	20	
N	Not exempt	89	20	
N	Not exempt			
N	Not exempt			91 12
N	Not exempt			91 12
N	Not exempt			91 12
N	Not exempt	81	10	
N	Not exempt	81	10	
N	Not exempt	84	12	
N	Not exempt	84	12	
N	Not exempt			98 16
N	Not exempt			100 15
N	Not exempt			107 15
N	Not exempt			107 15
N	Not exempt			90 28
T	Truck			
T	Truck			
N	Not exempt	84	13	
N	Not exempt	81	10	
N	Not exempt			90 13
N	Not exempt			90 13
N	Not exempt	84	13	
N	Not exempt	84	13	
N	Not exempt	81	10	
N	Not exempt			98 16
N	Not exempt			
N	Not exempt	74	13	
N	Not exempt			
N	Not exempt			
N	Not exempt	102	13	
N	Not exempt	89	11	
N	Not exempt	89	11	
N	Not exempt	86	7	
N	Not exempt	86	7	
N	Not exempt	86	7	
N	Not exempt			
N	Not exempt			
N	Not exempt			
N	Not exempt	81	7	
N	Not exempt	81	7	
N	Not exempt	94	13	
N	Not exempt	94	13	
N	Not exempt	94	13	
N	Not exempt	94	13	
N	Not exempt	77	11	
N	Not exempt			
N	Not exempt			
N	Not exempt			
N	Not exempt			
N	Not exempt			
N	Not exempt			94 16
N	Not exempt			94 16

N	Not exempt	94	16
N	Not exempt	94	16
N	Not exempt	92	33
N	Not exempt	92	33
N	Not exempt	102	16
N	Not exempt	102	16
N	Not exempt	102	16
T	Truck		
T	Truck		
T	Truck		
T	Truck		

Htchbk Pass Vol	Htchbk Lugg Vol	Annual Fuel Cost	EPA Calculated Annual Fuel Cost	Comment - Model Type Desc
		2400	2400	corrected SMOG rating for BIN 3 PZEV
		2400	2400	corrected SMOG rating, all models are
89	20	2400	2400	
		2200	2200	
		2400	2400	added A6 quattro configuration data to
		2200	2200	
		2200	2200	
		2400	2400	added A6 quattro configuration data to
		2400	2400	added A6 quattro configuration data to
		2200	2200	
		2050	2050	
		2700	2700	
		2700	2700	
		3550	3550	corrected hwy test value typo to 25.7 m
		2500	2600	
		3150	3150	
		2600	2600	
		3150	3150	
		3150	3150	
		2700	2700	
		2850	2850	
		2700	2700	
		2850	2850	
		2700	2700	
		2850	2850	
94	25	2850	2850	
		2200	2200	
		2200	2200	
74	13	2850	2850	
		4050	4050	
		3150	3150	
		4050	4050	
		3350	3350	
		4050	4050	
		4050	4050	
85	12	2300	2300	CORRECTED ANNUAL FUEL COST, P
85	12	2150	2150	
85	12	2150	2150	corrected annual fuel cost
		2400	2400	annual fuel cost corrected, post release
		2300	2300	corrected annual fuel cost
		2300	2300	adjusted annual fuel cost per CD-11-17
		2300	2300	EPA has assigned new test numbers
		2700	2700	
		2850	2850	
		2300	2300	
94	15	2050	2050	
94	15	2050	2050	
94	15	2600	2600	
94	15	2100	2100	
94	15	2300	2300	
		2100	2100	
		2200	2200	



2050	2050
2050	2050
2050	2050
2050	2050
1700	1700
1650	1650
2500	2500
2500	2500
2700	2700
2500	2500CORRECTED ANNUAL FUEL COST
2500	2500

annual fuel cost error. Please revise Verify  
City2 FE (Guide Hwy2 Fuel FE (Comb2 Fuel FE Low'd City2 MP Low'd Hwy2 MPLow'd Comb2 M  
models nationwide  
BIN 3 PZEV nationwide

the base level

the base level  
the base level

pg, release date change to week 32

8 13 10

8 14 10

8 13 10

8 14 10

OST RELEASE 10 AND AMS CODE USED

10 and AMS used

.....correct the highway value from 42.1 to 42.0 MPG and corresponding 5-cycle values







ive Fuel  
Range2 - Alt Fu Fuel2 Usage - / Fuel2 Usage DcFuel2 Unit - AlteFuel2 Unit DescFuel2 Annual Fu

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

238	E	Ethanol (E85)	MPG	miles per gallon	4650
238	E	Ethanol (E85)	MPG	miles per gallon	4650
238	E	Ethanol (E85)	MPG	miles per gallon	4650
238	E	Ethanol (E85)	MPG	miles per gallon	4650

[REDACTED]



Alternative Fuel	Descriptor - Model Type	Intake Valves Per Cyl	Exhaust Valves Per Cyl	Carline Class
	SIDI;	2	27	
	SIDI;	2	27	
	SIDI;	2	27	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	25	
	SIDI;	2	25	
	SIDI;	2	26	
	SIDI;	2	26	
	SIDI;	2	27	
	SIDI;	2	233	
		2	233	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	25	
	SIDI;	2	25	
	SIDI;	2	23	
	SIDI;	2	21	
	SIDI;	2	23	
4650	FFV;	2	25	
	SIDI;	2	24	
4650	FFV;	2	24	
	SIDI;	2	23	
4650	FFV;	2	23	
4650	FFV;	2	23	
	SIDI;	2	23	
		2	23	
		2	23	
	SIDI;	2	23	
		2	23	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	23	
		2	24	
		2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	25	
	SIDI;	2	25	



	2	25
	2	25
	2	27
	2	27
	2	25
	2	25
SIDI;	2	25
SIDI;	2	222
SIDI;	2	222
SIDI;	2	223
	2	223

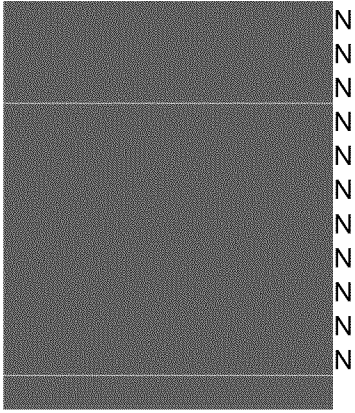
[illegible]

Midsize Cars	car
Midsize Cars	car
Small Station Wagons	car
Small Station Wagons	car
Midsize Cars	car
Midsize Cars	car
Midsize Cars	car
Special Purpose Vehicle, SUV 2WD	1
Special Purpose Vehicle, SUV 2WD	1
Special Purpose Vehicle, SUV 4WD	1
Special Purpose Vehicle, SUV 4WD	1

Calc Approach Desc	Sales	Release Date	EPA FE Label Dataset ID
Vehicle Specific 5-cycle label		6/11/2012	10148
Vehicle Specific 5-cycle label		6/11/2012	10147
Vehicle Specific 5-cycle label		6/11/2012	10146
Vehicle Specific 5-cycle label		5/21/2012	9967
Vehicle Specific 5-cycle label		5/21/2012	10209
Vehicle Specific 5-cycle label		5/21/2012	9974
Vehicle Specific 5-cycle label		5/21/2012	9971
Vehicle Specific 5-cycle label		5/21/2012	10211
Vehicle Specific 5-cycle label		5/21/2012	10210
Vehicle Specific 5-cycle label		5/21/2012	9976
Vehicle Specific 5-cycle label		6/18/2012	10162
Vehicle Specific 5-cycle label		4/13/2012	10178
Vehicle Specific 5-cycle label		4/13/2012	10179
Vehicle Specific 5-cycle label		8/6/2012	10195
Derived 5-cycle label		4/26/2012	10180
Derived 5-cycle label		6/11/2012	10150
Vehicle Specific 5-cycle label		7/16/2012	10203
Vehicle Specific 5-cycle label		6/8/2012	10077
Vehicle Specific 5-cycle label		12/3/2012	10078
Vehicle Specific 5-cycle label		5/21/2012	9982
Vehicle Specific 5-cycle label		5/21/2012	9985
Vehicle Specific 5-cycle label		5/21/2012	9983
Vehicle Specific 5-cycle label		5/21/2012	9986
Vehicle Specific 5-cycle label		5/21/2012	9984
Vehicle Specific 5-cycle label		7/30/2012	10075
Vehicle Specific 5-cycle label		7/30/2012	10074
Vehicle Specific 5-cycle label		6/18/2012	10166
Vehicle Specific 5-cycle label		6/18/2012	10167
Vehicle Specific 5-cycle label		6/18/2012	10200
Vehicle Specific 5-cycle label		3/30/2012	10181
Vehicle Specific 5-cycle label		4/9/2012	10208
Vehicle Specific 5-cycle label		3/30/2012	10185
Vehicle Specific 5-cycle label		4/9/2012	10207
Vehicle Specific 5-cycle label		3/30/2012	10183
Vehicle Specific 5-cycle label		3/30/2012	10184
Vehicle Specific 5-cycle label		7/30/2012	10187
Vehicle Specific 5-cycle label		7/30/2012	9628
Vehicle Specific 5-cycle label		7/30/2012	9666
Derived 5-cycle label		7/30/2012	10188
Vehicle Specific 5-cycle label		7/30/2012	9638
Vehicle Specific 5-cycle label		1/16/2012	10186
Vehicle Specific 5-cycle label		1/25/2012	9110
Vehicle Specific 5-cycle label		1/16/2012	9035
Vehicle Specific 5-cycle label		1/16/2012	9036
Vehicle Specific 5-cycle label		6/11/2012	10160
Vehicle Specific 5-cycle label		7/30/2012	9627
Vehicle Specific 5-cycle label		7/30/2012	9649
Vehicle Specific 5-cycle label		6/11/2012	10176
Vehicle Specific 5-cycle label		6/6/2012	10174
Vehicle Specific 5-cycle label		7/30/2012	9770
Vehicle Specific 5-cycle label		6/8/2012	10087
Vehicle Specific 5-cycle label		6/6/2012	10073

Vehicle Specific 5-cycle label	7/30/2012	9626
Vehicle Specific 5-cycle label	7/30/2012	9648
Vehicle Specific 5-cycle label	7/30/2012	9625
Vehicle Specific 5-cycle label	7/30/2012	9647
Vehicle Specific 5-cycle label	6/11/2012	10158
Vehicle Specific 5-cycle label	6/18/2012	10163
Vehicle Specific 5-cycle label	6/11/2012	10159
Derived 5-cycle label	6/18/2012	10196
Vehicle Specific 5-cycle label	6/11/2012	10091
Derived 5-cycle label	6/11/2012	10086
Vehicle Specific 5-cycle label	6/18/2012	10214

[illegible]



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Suppressed?	Police/Emerg?	Comments - Mfr Eng Cnfg	Cyl Deact?	Cyl Deact Desc
N	N	Test Group qualifies as PZEV.	N	
N	N	Test Group qualifies as PZEV.	N	
N	N	ENGINE CODE CDMA ONLY.	N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N	Engine Code CEUA. Start Stop EY	EY	Deactivation of cyl
N	N	Engine Code CEUA. Start Stop EY	EY	Deactivation of cyl
N	N	ENGINE CODE CDMA ONLY.	N	
N	N	ENGINE CODE CDMA ONLY.	N	
N	N		N	
N	N	Continental Flying Spur	N	
N	N	Engine Code CEUA. Start Stop EY	EY	Deactivation of cyl
N	N	Continental Flying Spur	N	
N	N	Engine Code CEUA. Start Stop EY	EY	Deactivation of cyl
N	N	Continental Flying Spur	N	
N	N	Continental Flying Spur	N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N	ENGINE CODE CDMA ONLY.	N	
N	N	ENGINE CODE CDMA ONLY.	N	
N	N	ENGINE CODE CDMA ONLY.	N	
N	N		N	
N	N		N	



N  
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N

SCR Equipped  
SCR Equipped

N  
N  
N  
N  
N  
N  
N  
N  
N  
N  
N  
N

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Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
N		N
N		N
Y	Electronic control / Hydraulic adjust	N
Y	position of intake/exhaust camshaft	N
Y	position of intake/exhaust camshaft	N
Y	position of intake/exhaust camshaft	N
N		N





Battery Type, If Other Total Voltage foBatt Energy Capacity (Batt Specific Energy (

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

hicle speed greater than 25 kmh  
hicle speed greater than 25 kmh

hicle speed greater than 25 kmh  
hicle speed greater than 25 kmh

[REDACTED]



Batt	Charger	Type	Desc	Comments	#	Capacitors	Regen	Braking	Type	Desc
------	---------	------	------	----------	---	------------	-------	---------	------	------

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Regen Braking Type, If Other	Regen Braking Wheels Source	Driver Cntrl	Regen Braking?	Fuel Cell Desc
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Usable H2 Fill Capacity (	Fuel Cell Onboard H2 Capacity (IHEV-EV Comments	# Drive Motor Gen
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Motor Gen Type Desc	Motor Gen Type, If Other	Rated Motor Gen Power (l
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[illegible]



MFI  
MFI  
MFI  
MFI  
CRDI  
CRDI  
GDI  
GDI  
GDI  
GDI  
CRDI

**Fuel Metering Sys Desc****Fuel Cell Vehicle Off Board Charge Capable (Y or N)**

Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	N
Multipoint/sequential fuel injection	N	
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection	N	
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection	N	
Multipoint/sequential fuel injection	N	
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection		
Multipoint/sequential fuel injection		
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection		
Multipoint/sequential fuel injection		
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		

Multipoint/sequential fuel injection  
Multipoint/sequential fuel injection  
Multipoint/sequential fuel injection  
Multipoint/sequential fuel injection  
Common Rail Direct Diesel Injection  
Common Rail Direct Diesel Injection  
Spark Ignition Direct Injection  
Spark Ignition Direct Injection  
Spark Ignition Direct Injection  
Spark Ignition Direct Injection  
Common Rail Direct Diesel Injection

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N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	5W40 VW 50501	N
N	5W40 VW 50501	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W30 VW 50700	N

Eng Mgmt System (Stop/Start	Trans in FE Guide (MFR	Trans as listed in FE Guide (derived
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(AV-S1)	Auto(AV-S1)
No	Auto(S8)	Auto(S8)
No	Manual(M6)	Manual(M6)
No	Auto(AV-S1)	Auto(AV-S1)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Manual(M6)	Manual(M6)
No	Auto(AV-S1)	Auto(AV-S1)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(S6)	Auto(S6)
No	Auto(S8)	Auto(S8)
No	Auto(S6)	Auto(S6)
No	Auto(S8)	Auto(S8)
No	Auto(S6)	Auto(S6)
No	Auto(S6)	Auto(S6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(S6)	Auto(S6)
No	Manual(M5)	Manual(M5)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(S6)	Auto(S6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(S6)	Auto(S6)
No	Auto(S6)	Auto(S6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(S6)	Auto(S6)
No	Manual(M5)	Manual(M5)
No	Manual(M6)	Manual(M6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)

No	Auto(S6)	Auto(S6)
No	Manual(M5)	Manual(M5)
No	Auto(S6)	Auto(S6)
No	Manual(M5)	Manual(M5)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(S6)	Auto(S6)
No	Manual(M6)	Manual(M6)
No	Auto(S6)	Auto(S6)
No	Auto(S8)	Auto(S8)

**Model Type Desc (MFR entered) Charge Depleting Calc Appr CcCharge Depleting Calc Appr Desi**

paddles)(AMS6)

A3 frt manual

paddles)(AMS6)

Audi A6 CVT

Audi Q7

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

TTCoupe)(AMS6)

TTCoupe)(AMS6)

TTCoupe)(AMS6)

TTRS

paddles)(AMS6)

paddles)(AMS6)

paddles)(AMS6)

CC M6

paddles)(AMS6)

paddles)(AMS6)

paddles)(AMS6)



paddles)(AMS6)

paddles)(AMS6)

Tiguan front

Charge Sustaining Calc Appr CCharge Sustaining Calc Appr DeEPA Calculated Annual Fuel Cost

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



EPA Calculated Gas Guzzler MPG	MFR Calculated Gas Guzzler MPG	EPA Calculated Gas Guzzler Indicator ('
		30.8
		30.4
		30.9
		35.2
		4.2
		33.2
		35.2
		4.2
		4.2
		33.2
		36.9
		26.1
		26.1
		19.3
		29.5
		22.9
		28.1
		23
		22.6
		26.9
		23.5
		26.9
		23.5
		26.4
		25.5
		25.5
		33.3
		33.3
		25.6
		17.2
		23.6
		17.4
		21.8
		17.2
		17.4
		31.8
		31.6
		31.9
		31.5
		30.3
		32.3
		31.8
		25.8
		24.8
		32.4
		33.1
		32.2
		28.5
		34.8
		31.2
		35
		32.6

33.1  
32.2  
33.1  
32.2  
44.6  
46.4  
28.5  
29.9  
26.4  
29.6  
23.3

[illegible]

Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
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Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.

**To:** richard.thomas@vw.com[]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Wed 6/20/2012 5:32:45 PM  
**Subject:** re: 2013 FE Guide - data in Verify as of 6/15/2012 attached; some have errors  
[VW Group-2013 FE Guide-rel10-all-rel-dates-no-sales-6-15-2012.xlsx](#)

Richard,

Attached is a spreadsheet with all the 2013 FE Label data in Verify as of 6/15/2012.

The data highlighted in green have errors. Please correct the errors when you get a chance.

Note that I'm still sending releasable error-free data to DOE for posting on [www.fueleconomy.gov](http://www.fueleconomy.gov) on the 1st and 15th of the month.

Thanks



EPA comme	VERIFY	Model	Mfr Name (blue	Division	Carline	Verif	Index (Eng
		2013	Audi	Audi	A3	ADX	59 2.0
		2013	Audi	Audi	A3	ADX	58 2.0
Error- hatch	Y	2013	Audi	Audi	A3 quattro	ADX	60 2.0
Error in Tran	Y	2013	Audi	Audi	A4	ADX	35 2.0
Error -- gas	Y	2013	Audi	Audi	A4 quattro	ADX	37 2.0
		2013	Audi	Audi	A4 quattro	ADX	40 2.0
Error in Tran	Y	2013	Audi	Audi	A5 Cabriolet	ADX	36 2.0
Error -- gas	Y	2013	Audi	Audi	A5 Cabriolet quattro	ADX	39 2.0
Error -- gas	Y	2013	Audi	Audi	A5 quattro	ADX	38 2.0
		2013	Audi	Audi	A5 quattro	ADX	41 2.0
Error in Tran	Y	2013	Audi	Audi	A6	ADX	65 2.0
		2013	Audi	Audi	A8	ADX	128 3.0
		2013	Audi	Audi	A8L	ADX	129 3.0
		2013	Audi	Audi	A8L	ADX	109 6.3
Error in com	Y	2013	Audi	Audi	allroad quattro	ADX	134 2.0
		2013	Audi	Audi	Q7	ADX	61 3.0
Diesel;		2013	Audi	Audi	Q7	ADX	53 3.0
		2013	Audi	Audi	RS5	ADX	49 4.2
Potential err	Y	2013	Audi	Audi	RS5 Cabriolet	ADX	52 4.2
		2013	Audi	Audi	S4	ADX	42 3.0
		2013	Audi	Audi	S4	ADX	45 3.0
		2013	Audi	Audi	S5	ADX	43 3.0
		2013	Audi	Audi	S5	ADX	46 3.0
		2013	Audi	Audi	S5 Cabriolet quattro	ADX	44 3.0
		2013	Audi	Audi	S6	ADX	48 4.0
		2013	Audi	Audi	S7	ADX	47 4.0
		2013	Audi	Audi	TT Coupe quattro	ADX	66 2.0
		2013	Audi	Audi	TT Roadster quattro	ADX	67 2.0
		2013	Audi	Audi	TTRS Coupe	ADX	69 2.5
		2013	Bentley	Bentley Motors L	Continental Flying Spur	BEX	110 6.0
		2013	Bentley	Bentley Motors L	Continental GT	BEX	108 4.0
		2013	Bentley	Bentley Motors L	Continental GT	BEX	113 6.0
		2013	Bentley	Bentley Motors L	Continental GTC	BEX	107 4.0
		2013	Bentley	Bentley Motors L	Continental GTC	BEX	111 6.0
		2013	Bentley	Bentley Motors L	Continental Supersports Conv	BEX	112 6.0
		2013	Volkswagen	Volkswagen	BEETLE	VWX	19 2.0
		2013	Volkswagen	Volkswagen	BEETLE	VWX	17 2.5
		2013	Volkswagen	Volkswagen	BEETLE	VWX	27 2.5
Error in high	Y	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	VWX	20 2.0
		2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	VWX	18 2.5
		2013	Volkswagen	Volkswagen	CC	VWX	1 2.0
		2013	Volkswagen	Volkswagen	CC	VWX	4 2.0
		2013	Volkswagen	Volkswagen	CC	VWX	2 3.6
		2013	Volkswagen	Volkswagen	CC 4MOTION	VWX	3 3.6
		2013	Volkswagen	Volkswagen	Eos	VWX	21 2.0
		2013	Volkswagen	Volkswagen	GOLF	VWX	16 2.5
		2013	Volkswagen	Volkswagen	GOLF	VWX	26 2.5
		2013	Volkswagen	Volkswagen	Golf R	VWX	57 2.0
		2013	Volkswagen	Volkswagen	GTI	VWX	22 2.0
		2013	Volkswagen	Volkswagen	GTI	VWX	23 2.0
		2013	Volkswagen	Volkswagen	Jetta	VWX	50 2.0
		2013	Volkswagen	Volkswagen	Jetta	VWX	51 2.0

	2013 Volkswagen	Volkswagen	Jetta	VWX	15	2.5
	2013 Volkswagen	Volkswagen	Jetta	VWX	25	2.5
	2013 Volkswagen	Volkswagen	JETTA SPORTWAGEN	VWX	14	2.5
	2013 Volkswagen	Volkswagen	JETTA SPORTWAGEN	VWX	24	2.5
Diesel;	2013 Volkswagen	Volkswagen	Passat	VWX	62	2.0
Diesel;	2013 Volkswagen	Volkswagen	Passat	VWX	64	2.0
	2013 Volkswagen	Volkswagen	Passat	VWX	63	3.6
	2013 Volkswagen	Volkswagen	TIGUAN	VWX	68	2.0
	2013 Volkswagen	Volkswagen	TIGUAN	VWX	56	2.0
	2013 Volkswagen	Volkswagen	TIGUAN 4MOTION	VWX	55	2.0
Diesel;	2013 Volkswagen	Volkswagen	TOUAREG	VWX	54	3.0

City	Hwy	Con	Low	Low	Low	City	Una	Hwy	Una	Comb	Ur	City	Unrd	Adj	FE - Cor
4 Auto(AM-S6)	21	28	24				26.6	38.2	30.8102						21.3388
4 Manual(M6)	21	30	24				25.3	40.3	30.3902						20.8146
4 Auto(S6)	20	27	22				27.2	37.1	30.9119						20.891
4 Auto(S8)	20	30	24				25.6856	40.5676	30.7641						20.3576
4 Manual(M6)	22	32	26				27.624	43.9699	33.1736						22.2425
4 Auto(V-S1)	24	31	26				30.1185	44.4328	35.2251						23.6355
4 Auto(S8)	20	30	24				25.6856	40.5676	30.7641						20.3576
4 Auto(S8)	20	30	24				25.6856	40.5676	30.7641						20.3576
4 Manual(M6)	22	32	26				27.624	43.9699	33.1736						22.2425
4 Auto(V-S1)	25	33	28				31.4	46.9	36.8857						24.5044
6 Auto(S8)	18	28	21				22.1698	36.6499	26.9637						17.7044
6 Auto(S8)	18	28	21				22.1698	36.6499	26.9637						17.7044
12 Auto(S8)	13	21	16				15.9	25.7	19.1935						13.1387
4 Auto(S8)	20	27	22				25.2	37.3	29.5075						19.9584
6 Auto(S8)	16	22	18				19.2813	29.852	22.9361						15.522
6 Auto(S8)	19	28	22				22.8	39.1	28.0649						18.74
8 Auto(AM-S7)	16	23	18				19.1	30	22.8332						15.7409
8 Auto(AM-S7)	16	22	18				19.2	28.9	22.6159						15.8793
6 Auto(AM-S7)	18	28	21				22.4	35.8	26.9372						18.117
6 Manual(M6)	17	26	20				18.9	33.4	23.4887						17.0438
6 Auto(AM-S7)	18	28	21				22.4	35.8	26.9372						18.117
6 Manual(M6)	17	26	20				18.9	33.4	23.4887						17.0438
6 Auto(AM-S7)	18	26	21				22.1	34.7	26.4165						17.6699
8 Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866						16.761
8 Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866						16.761
4 Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217						22.407
4 Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217						22.407
5 Manual(M6)	18	25	20				21.2	34.2	25.5746						17.751
12 Auto(S6)	11	19	14				13.7	24.6	17.112						11.2476
8 Auto(S8)	15	24	18				19	33.5	23.5959						15.0109
12 Auto(S6)	12	19	14				13.9	24.7	17.3049						11.5043
8 Auto(S8)	14	24	17				17.4	30.8	21.6358						14.0639
12 Auto(S6)	11	19	14				13.7	24.6	17.112						11.2476
12 Auto(S6)	12	19	14				13.9	24.7	17.3049						11.5043
4 Auto(AM-S6)	22	30	25				26.5	42.0656	31.7942						22.0202
5 Auto(S6)	22	29	25				27.3831	39.0128	31.6255						22.2863
5 Manual(M5)	22	31	25				26.4199	42.8586	31.9312						21.7202
4 Auto(S6)	21	27	23				26.8	40.2092	31.532						21.1383
5 Auto(S6)	21	27	23				26.0395	37.7702	30.2701						21.2302
4 Auto(AM-S6)	22	31	25				26.977	42.4936	32.2814						21.8706
4 Manual(M6)	21	32	25				25.7923	44.3415	31.7736						20.9361
6 Auto(S6)	17	27	21				21.2	35.1	25.7972						17.4935
6 Auto(S6)	17	25	20				20.5	33.5	24.8373						16.9415
4 Auto(AM-S6)	22	30	25				27.5	41.5	32.4219						21.7634
5 Auto(S6)	24	31	26				28.0549	42.473	33.1132						23.6446
5 Manual(M5)	23	33	26				26.3044	44.5088	32.2378						22.7343
4 Manual(M6)	19	27	22				23.9	37.1	28.456						19.278
4 Auto(AM-S6)	24	33	27				29.9333	43.5096	34.8229						24.2237
4 Manual(M6)	21	31	25				26.0527	41.2042	31.2185						21.2839
4 Auto(AM-S6)	24	32	27				29.5139	45.1099	34.9517						23.7854
4 Manual(M6)	22	33	26				26.5556	44.9945	32.56						21.8931

5 Auto(S6)	24	31	26	28.0549	42.473	33.1132	23.6446
5 Manual(M5)	23	33	26	26.3044	44.5088	32.2378	22.7343
5 Auto(S6)	24	31	26	28.0549	42.473	33.1132	23.6446
5 Manual(M5)	23	33	26	26.3044	44.5088	32.2378	22.7343
4 Auto(AM-S6)	30	40	34	37.9	56.8	44.5744	30.4633
4 Manual(M6)	31	43	35	38.2	62.8	46.3746	30.8024
6 Auto(AM-S6)	20	28	23	23.9	37.3	28.5088	19.7174
4 Auto(S6)	21	26	23	26.0779	36.3534	29.8782	20.6233
4 Manual(M6)	18	26	21	21.7	35.8	26.3745	18.1488
4 Auto(S6)	20	26	23	25.7924	36.0745	29.5873	20.402
6 Auto(S8)	20	29	23	24.1	22.4	23.3041	19.649

WV Fuel	Unrd Adj FE - Con	Comb Unrd Adj FE - Con	Guzzler?	Air Aspir Method
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27.7919	23.8286	TC
29.9953	24.1394	TC
28.1035	23.6187	TC
30.6684	26.3554	TC
29.8271	23.7508G	TC
32.0861	25.8049	TC
30.6684	26.3554	TC
29.8271	23.7508G	TC
29.8271	23.7508G	TC
32.0861	25.8049	TC
32.5529	27.5721	TC
27.5645	21.101	SC
27.5645	21.101	SC
20.6025	15.6978G	NA
26.6824	22.5112	TC
21.5458	17.7559	SC
27.62	21.9099	TC
23.3075	18.4339	NA
22.1836	18.2078	NA
27.558	21.419	SC
26.023	20.1767	SC
27.558	21.419	SC
26.023	20.1767	SC
25.953	20.6333	SC
26.9697	20.2022	TC
26.9697	20.2022	TC
31.1674	25.6515	TC
31.1674	25.6515	TC
25.2021	20.4751	TC
18.7327	13.7134G	TC
24.4645	18.1706	TC
18.877	13.9574G	TC
23.9773	17.2766G	TC
18.7327	13.7134G	TC
18.877	13.9574G	TC
29.5574	24.8746	TC
28.5683	24.7338	NA
30.6767	25.0054	NA
28.6751	23.9738	TC
26.9749	23.4804	NA
31.0367	25.2227	TC
31.656	24.7	TC
26.5716	20.6716	NA
25.219	19.8774	NA
30.1121	24.8658	TC
31.0458	26.486	NA
32.7402	26.3594	NA
26.8882	22.0917	TC
32.5108	27.3624	TC
30.8324	24.7304	TC
31.6043	26.7652	TC
32.6043	25.6912	TC

31.0458	26.486	NA
32.7402	26.3594	NA
31.0458	26.486	NA
32.7402	26.3594	NA
40.2057	34.1916	TC
42.6219	35.1943	TC
27.8048	22.6868	NA
26.0617	22.7606	TC
26.2617	21.0791	TC
25.8545	22.5412	TC
28.9961	22.9829	TC

<b>Air Aspiration Method Desc</b>	<b>Trans</b>	<b>Trans Desc</b>	<b>Trans, Other</b>	<b># Gears</b>
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	SCV	Selectable Continuously Vari		1
Turbocharged	SA	Semi-Automatic		8
Turbocharged	M	Manual		6
Turbocharged	SCV	Selectable Continuously Vari		1
Turbocharged	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		8
Turbocharged	M	Manual		6
Turbocharged	SCV	Selectable Continuously Vari		1
Supercharged	SA	Semi-Automatic		8
Supercharged	SA	Semi-Automatic		8
Naturally Aspirated	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		8
Supercharged	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		8
Naturally Aspirated	AMS	Automated Manual- Selectat		7
Naturally Aspirated	AMS	Automated Manual- Selectat		7
Supercharged	AMS	Automated Manual- Selectat		7
Supercharged	M	Manual		6
Supercharged	AMS	Automated Manual- Selectat		7
Supercharged	M	Manual		6
Supercharged	AMS	Automated Manual- Selectat		7
Turbocharged	AMS	Automated Manual- Selectat		7
Turbocharged	AMS	Automated Manual- Selectat		7
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6
Turbocharged	SA	Semi-Automatic		6
Turbocharged	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		6
Turbocharged	SA	Semi-Automatic		8
Turbocharged	SA	Semi-Automatic		6
Turbocharged	SA	Semi-Automatic		6
Turbocharged	AMS	Automated Manual- Selectat		6
Naturally Aspirated	SA	Semi-Automatic		6
Naturally Aspirated	M	Manual		5
Turbocharged	AMS	Automated Manual- Selectat		6
Naturally Aspirated	SA	Semi-Automatic		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6
Naturally Aspirated	SA	Semi-Automatic		6
Naturally Aspirated	SA	Semi-Automatic		6
Turbocharged	AMS	Automated Manual- Selectat		6
Naturally Aspirated	SA	Semi-Automatic		6
Naturally Aspirated	M	Manual		5
Turbocharged	M	Manual		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6
Turbocharged	AMS	Automated Manual- Selectat		6
Turbocharged	M	Manual		6

Naturally Aspirated	SA	Semi-Automatic	6
Naturally Aspirated	M	Manual	5
Naturally Aspirated	SA	Semi-Automatic	6
Naturally Aspirated	M	Manual	5
Turbocharged	AMS	Automated Manual- Selectat	6
Turbocharged	M	Manual	6
Naturally Aspirated	AMS	Automated Manual- Selectat	6
Turbocharged	SA	Semi-Automatic	6
Turbocharged	M	Manual	6
Turbocharged	SA	Semi-Automatic	6
Turbocharged	SA	Semi-Automatic	8



[illegible]

Y	N	F	2-Wheel Drive, Front
N	N	F	2-Wheel Drive, Front
Y	N	F	2-Wheel Drive, Front
N	N	F	2-Wheel Drive, Front
Y	N	F	2-Wheel Drive, Front
N	N	F	2-Wheel Drive, Front
Y	N	F	2-Wheel Drive, Front
Y	N	F	2-Wheel Drive, Front
N	N	F	2-Wheel Drive, Front
Y	N	A	All Wheel Drive
Y	N	A	All Wheel Drive

Primary Basic Engine/Testgroup	Max Ethar	Max Biodie	Range1 - Moc	Fuel Usage
DADXV02.03PA	10			GP
DADXV02.03PA	10			GP
DADXV02.03UA	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXV02.03UB	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DVWXV06.3UA8	10			GP
DADXV02.03UB	10			GP
DADXT03.0TLF	10			GP
DADXT03.03UG		5		DU
DADXV04.23UL	10			GP
DADXV04.23UL	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DADXJ03.03UF	10			GP
DADXV04.03UJ	10			GP
DADXV04.03UJ	10			GP
DADXV02.03UA	10			GP
DADXV02.03UA	10			GP
DADXV02.53UK	10			GP
DBEXV06.0501	85	333		GP
DADXV04.03UJ	10			GP
DBEXV06.0501	85	333		GP
DADXV04.03UJ	10			GP
DBEXV06.0501	85	333		GP
DBEXV06.0501	85	333		GP
DVWXJ02.03UA	10			GP
DVWXV02.5U3A	10			G
DVWXV02.5U3M	10			G
DVWXJ02.03UA	10			GP
DVWXV02.5U3A	10			G
DVWXJ02.03UA	10			GP
DVWXJ02.03UA	10			GP
DVWXV03.6U46	10			GP
DVWXV03.6U46	10			GP
DVWXV02.03SA	10			GP
DVWXV02.5U3A	10			G
DVWXV02.5U3M	10			G
DADXV02.03UA	10			GP
DADXV02.03UA	10			GP
DADXV02.03UA	10			GP
DVWXJ02.03UA	10			GP
DVWXJ02.03UA	10			GP

DVWXV02.5U3A	10		G
DVWXV02.5U3M	10		G
DVWXV02.5U3A	10		G
DVWXV02.5U3M	10		G
DVWXV02.0U4S		5	DU
DVWXV02.0U4S		5	DU
DVWXV03.6U41	10		GP
DVWXJ02.03UA	10		GP
DVWXJ02.03UA	10		GP
DVWXJ02.03UA	10		GP
DADXT03.02UG		5	DU

[illegible]

Gasoline (Regular Unleaded Recommended)	MPG	miles per gallon
Gasoline (Regular Unleaded Recommended)	MPG	miles per gallon
Gasoline (Regular Unleaded Recommended)	MPG	miles per gallon
Gasoline (Regular Unleaded Recommended)	MPG	miles per gallon
Diesel, ultra low sulfur (15 ppm, maximum)	MPG	miles per gallon
Diesel, ultra low sulfur (15 ppm, maximum)	MPG	miles per gallon
Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
Diesel, ultra low sulfur (15 ppm, maximum)	MPG	miles per gallon

Gas Guzzler Exempt ( Gas Guzzler Ex2Dr Pass Vol 2Dr Lugg Vol 4Dr Pass Vol 4Dr Lugg Vol				
N	Not exempt	89	20	
N	Not exempt	89	20	
N	Not exempt			
N	Not exempt			91 12
N	Not exempt			91 12
N	Not exempt			91 12
N	Not exempt	81	10	
N	Not exempt	81	10	
N	Not exempt	84	12	
N	Not exempt	84	12	
N	Not exempt			98 16
N	Not exempt			100 15
N	Not exempt			107 15
N	Not exempt			107 15
N	Not exempt			90 28
T	Truck			
T	Truck			
N	Not exempt	84	13	
N	Not exempt	81	10	
N	Not exempt			90 13
N	Not exempt			90 13
N	Not exempt	84	13	
N	Not exempt	84	13	
N	Not exempt	81	10	
N	Not exempt			98 16
N	Not exempt			
N	Not exempt	74	13	
N	Not exempt			
N	Not exempt			
N	Not exempt	102	13	
N	Not exempt	89	11	
N	Not exempt	89	11	
N	Not exempt	86	7	
N	Not exempt	86	7	
N	Not exempt	86	7	
N	Not exempt			
N	Not exempt			
N	Not exempt			
N	Not exempt	81	7	
N	Not exempt	81	7	
N	Not exempt	94	13	
N	Not exempt	94	13	
N	Not exempt	94	13	
N	Not exempt	94	13	
N	Not exempt	77	11	
N	Not exempt			
N	Not exempt			
N	Not exempt			
N	Not exempt			
N	Not exempt			
N	Not exempt			94 16
N	Not exempt			94 16

N	Not exempt	94	16
N	Not exempt	94	16
N	Not exempt	92	33
N	Not exempt	92	33
N	Not exempt	102	16
N	Not exempt	102	16
N	Not exempt	102	16
T	Truck		
T	Truck		
T	Truck		
T	Truck		



Htchbk Pass Vol	Htchbk Lugg Vol	Annual Fuel Cost	EPA Calculated Annual Fuel Cost	Comment - Model Type Desc
		2400	2400	corrected SMOG rating for BIN 3 PZEV
		2400	2400	corrected SMOG rating, all models are
89	20	2400	2400	
		2200	2200	
		2400	2400	added A6 quattro configuration data to
		2200	2200	
		2200	2200	
		2400	2400	added A6 quattro configuration data to
		2400	2400	added A6 quattro configuration data to
		2200	2200	
		2050	2050	
		2700	2700	
		2700	2700	
		3550	3550	corrected hwy test value typo to 25.7 m
		2500	2600	
		3150	3150	
		2600	2600	
		3150	3150	
		3150	3150	
		2700	2700	
		2850	2850	
		2700	2700	
		2850	2850	
		2700	2700	
		2850	2850	
94	25	2850	2850	
		2200	2200	
		2200	2200	
74	13	2850	2850	
		4050	4050	
		3150	3150	
		4050	4050	
		3350	3350	
		4050	4050	
		4050	4050	
85	12	2300	2300	CORRECTED ANNUAL FUEL COST, P
85	12	2150	2150	
85	12	2150	2150	corrected annual fuel cost
		2400	2400	annual fuel cost corrected, post release
		2300	2300	corrected annual fuel cost
		2300	2300	adjusted annual fuel cost per CD-11-17
		2300	2300	EPA has assigned new test numbers
		2700	2700	
		2850	2850	
		2300	2300	
94	15	2050	2050	
94	15	2050	2050	
94	15	2600	2600	
94	15	2100	2100	
94	15	2300	2300	
		2100	2100	
		2200	2200	

2050	2050
2050	2050
2050	2050
2050	2050
1700	1700
1650	1650
2500	2500
2500	2500
2700	2700
2500	2500CORRECTED ANNUAL FUEL COST
2500	2500

annual fuel cost error. Please revise. Verify  
City2 FE (Guide Hwy2 FE) FE (Comb2 Fuel FE Low'd City2 MP Low'd Hwy2 MP Low'd Comb2 M  
models nationwide  
BIN 3 PZEV nationwide

the base level

the base level  
the base level

pg, release date change to week 32

8 13 10

8 14 10

8 13 10

8 14 10

OST RELEASE 10 AND AMS CODE USED

10 and AMS used

.....correct the highway value from 42.1 to 42.0 MPG and corresponding 5-cycle values



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ive Fuel  
Range2 - Alt Fu Fuel2 Usage - / Fuel2 Usage DcFuel2 Unit - AlteFuel2 Unit DescFuel2 Annual Fu

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

238	E	Ethanol (E85)	MPG	miles per gallon	4650
238	E	Ethanol (E85)	MPG	miles per gallon	4650
238	E	Ethanol (E85)	MPG	miles per gallon	4650
238	E	Ethanol (E85)	MPG	miles per gallon	4650

[REDACTED]





Alternative Fuel	Descriptor - Model Type	Intake Valves Per Cyl	Exhaust Valves Per Cyl	Carline Class
	SIDI;	2	27	
	SIDI;	2	27	
	SIDI;	2	27	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	25	
	SIDI;	2	25	
	SIDI;	2	26	
	SIDI;	2	26	
	SIDI;	2	27	
	SIDI;	2	233	
		2	233	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	23	
	SIDI;	2	25	
	SIDI;	2	25	
	SIDI;	2	23	
	SIDI;	2	21	
	SIDI;	2	23	
4650	FFV;	2	25	
	SIDI;	2	24	
4650	FFV;	2	24	
	SIDI;	2	23	
4650	FFV;	2	23	
4650	FFV;	2	23	
	SIDI;	2	23	
		2	23	
		2	23	
	SIDI;	2	23	
		2	23	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	23	
		2	24	
		2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	24	
	SIDI;	2	25	
	SIDI;	2	25	

	2	25
	2	25
	2	27
	2	27
	2	25
	2	25
SIDI;	2	25
SIDI;	2	222
SIDI;	2	222
SIDI;	2	223
	2	223

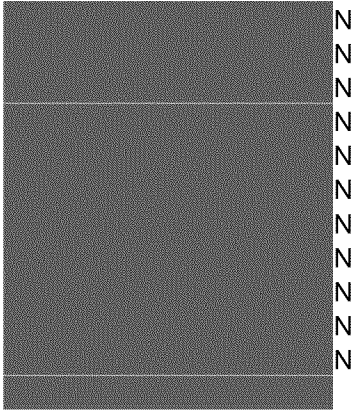


Midsize Cars	car
Midsize Cars	car
Small Station Wagons	car
Small Station Wagons	car
Midsize Cars	car
Midsize Cars	car
Midsize Cars	car
Special Purpose Vehicle, SUV 2WD	1
Special Purpose Vehicle, SUV 2WD	1
Special Purpose Vehicle, SUV 4WD	1
Special Purpose Vehicle, SUV 4WD	1

Calc Approach Desc	Sales	Release Date	EPA FE Label Dataset ID
Vehicle Specific 5-cycle label		6/11/2012	10148
Vehicle Specific 5-cycle label		6/11/2012	10147
Vehicle Specific 5-cycle label		6/11/2012	10146
Vehicle Specific 5-cycle label		5/21/2012	9967
Vehicle Specific 5-cycle label		5/21/2012	10209
Vehicle Specific 5-cycle label		5/21/2012	9974
Vehicle Specific 5-cycle label		5/21/2012	9971
Vehicle Specific 5-cycle label		5/21/2012	10211
Vehicle Specific 5-cycle label		5/21/2012	10210
Vehicle Specific 5-cycle label		5/21/2012	9976
Vehicle Specific 5-cycle label		6/18/2012	10162
Vehicle Specific 5-cycle label		4/13/2012	10178
Vehicle Specific 5-cycle label		4/13/2012	10179
Vehicle Specific 5-cycle label		8/6/2012	10195
Derived 5-cycle label		4/26/2012	10180
Derived 5-cycle label		6/11/2012	10150
Vehicle Specific 5-cycle label		7/16/2012	10203
Vehicle Specific 5-cycle label		6/8/2012	10077
Vehicle Specific 5-cycle label		12/3/2012	10078
Vehicle Specific 5-cycle label		5/21/2012	9982
Vehicle Specific 5-cycle label		5/21/2012	9985
Vehicle Specific 5-cycle label		5/21/2012	9983
Vehicle Specific 5-cycle label		5/21/2012	9986
Vehicle Specific 5-cycle label		5/21/2012	9984
Vehicle Specific 5-cycle label		7/30/2012	10075
Vehicle Specific 5-cycle label		7/30/2012	10074
Vehicle Specific 5-cycle label		6/18/2012	10166
Vehicle Specific 5-cycle label		6/18/2012	10167
Vehicle Specific 5-cycle label		6/18/2012	10200
Vehicle Specific 5-cycle label		3/30/2012	10181
Vehicle Specific 5-cycle label		4/9/2012	10208
Vehicle Specific 5-cycle label		3/30/2012	10185
Vehicle Specific 5-cycle label		4/9/2012	10207
Vehicle Specific 5-cycle label		3/30/2012	10183
Vehicle Specific 5-cycle label		3/30/2012	10184
Vehicle Specific 5-cycle label		7/30/2012	10187
Vehicle Specific 5-cycle label		7/30/2012	9628
Vehicle Specific 5-cycle label		7/30/2012	9666
Derived 5-cycle label		7/30/2012	10188
Vehicle Specific 5-cycle label		7/30/2012	9638
Vehicle Specific 5-cycle label		1/16/2012	10186
Vehicle Specific 5-cycle label		1/25/2012	9110
Vehicle Specific 5-cycle label		1/16/2012	9035
Vehicle Specific 5-cycle label		1/16/2012	9036
Vehicle Specific 5-cycle label		6/11/2012	10160
Vehicle Specific 5-cycle label		7/30/2012	9627
Vehicle Specific 5-cycle label		7/30/2012	9649
Vehicle Specific 5-cycle label		6/11/2012	10176
Vehicle Specific 5-cycle label		6/6/2012	10174
Vehicle Specific 5-cycle label		7/30/2012	9770
Vehicle Specific 5-cycle label		6/8/2012	10087
Vehicle Specific 5-cycle label		6/6/2012	10073

Vehicle Specific 5-cycle label	7/30/2012	9626
Vehicle Specific 5-cycle label	7/30/2012	9648
Vehicle Specific 5-cycle label	7/30/2012	9625
Vehicle Specific 5-cycle label	7/30/2012	9647
Vehicle Specific 5-cycle label	6/11/2012	10158
Vehicle Specific 5-cycle label	6/18/2012	10163
Vehicle Specific 5-cycle label	6/11/2012	10159
Derived 5-cycle label	6/18/2012	10196
Vehicle Specific 5-cycle label	6/11/2012	10091
Derived 5-cycle label	6/11/2012	10086
Vehicle Specific 5-cycle label	6/18/2012	10214

Unique Label?	Label Recalc?	Relabel	Relabel Desc
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Suppressed?	Police/Emerg?	Comments - Mfr Eng Cnfg	Cyl Deact?	Cyl Deact Desc
N	N	Test Group qualifies as PZEV.	N	
N	N	Test Group qualifies as PZEV.	N	
Z	N	ENGINE CODE CDMA ONLY.	N	
Z	N		N	
Z	N		N	
N	N		N	
Z	N		N	
Z	N		N	
N	N		N	
Z	N		N	
N	N		N	
N	N		N	
N	N		N	
Z	N		N	
N	N		N	
N	N		N	
N	N		N	
Z	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N	Engine Code CEUA. Start Stop EY	EY	Deactivation of cyl
N	N	Engine Code CEUA. Start Stop EY	EY	Deactivation of cyl
N	N	ENGINE CODE CDMA ONLY.	N	
N	N	ENGINE CODE CDMA ONLY.	N	
N	N		N	
N	N	Continental Flying Spur	N	
N	N	Engine Code CEUA. Start Stop EY	EY	Deactivation of cyl
N	N	Continental Flying Spur	N	
N	N	Engine Code CEUA. Start Stop EY	EY	Deactivation of cyl
N	N	Continental Flying Spur	N	
N	N	Continental Flying Spur	N	
N	N		N	
N	N		N	
N	N		N	
Z	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N		N	
N	N	ENGINE CODE CDMA ONLY.	N	
N	N	ENGINE CODE CDMA ONLY.	N	
N	N	ENGINE CODE CDMA ONLY.	N	
N	N		N	
N	N		N	

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SCR Equipped  
SCR Equipped

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2017-FFP 003806

Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
N		N
N		N
Y	Electronic control / Hydraulic adjust	N
Y	position of intake/exhaust camshaft	N
Y	position of intake/exhaust camshaft	N
Y	position of intake/exhaust camshaft	N
N		N





Battery Type, If Other Total Voltage foBatt Energy Capacity (Batt Specific Energy (

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

hicle speed greater than 25 kmh  
hicle speed greater than 25 kmh

hicle speed greater than 25 kmh  
hicle speed greater than 25 kmh

[REDACTED]





Batt	Charger	Type	Desc	Comments	#	Capacitors	Regen	Braking	Type	Desc
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Regen Braking Type, If Other	Regen Braking Wheels Source	Driver Cntrl Regen Braking?	Fuel Cell Desc
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Usable H2 Fill Capacity (	Fuel Cell Onboard H2 Capacity (IHEV-EV Comments	# Drive Motor Gen
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Motor Gen Type Desc	Motor Gen Type, If Other	Rated Motor Gen Power (l
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[illegible]

MFI  
MFI  
MFI  
MFI  
CRDI  
CRDI  
GDI  
GDI  
GDI  
GDI  
CRDI

**Fuel Metering Sys Desc****Fuel Cell Vehicle Off Board Charge Capable (Y or N)**

Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	N
Multipoint/sequential fuel injection	N	
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection	N	
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection	N	
Multipoint/sequential fuel injection	N	
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection		
Multipoint/sequential fuel injection		
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection		
Multipoint/sequential fuel injection		
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		

Multipoint/sequential fuel injection  
Multipoint/sequential fuel injection  
Multipoint/sequential fuel injection  
Multipoint/sequential fuel injection  
Common Rail Direct Diesel Injection  
Common Rail Direct Diesel Injection  
Spark Ignition Direct Injection  
Spark Ignition Direct Injection  
Spark Ignition Direct Injection  
Spark Ignition Direct Injection  
Common Rail Direct Diesel Injection

Camless Valvetrain (Y or N)	Oil Viscosity	Eng Mgmt System ( )
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W30 VW 50700	N
N	5W30 VW 50400 / 50700	N
N	5W30 VW 50400 / 50700	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W30 VW 50400 / 50700	N
N	5W30 VW 50400 / 50700	N
N	5W40	N
N	5W40	N
N	5W40 VW 50200	N
N	5W30 VW 504 00	N
N	5W30 VW 50400 / 50700	N
N	5W30 VW 504 00	N
N	5W30 VW 50400 / 50700	N
N	5W30 VW 504 00	N
N	5W30 VW 504 00	N
N	5W40 VW 50200	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	5W40 VW 50200	N
N	10W40 / VW50200	N
N	5W40 VW 50200	N
N	5W-40 VW50200	N
N	5W-40 VW50200	N
N	5W40 / VW50200	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	5W40	N
N	5W40	N
N	5W40	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N

N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	5W40 VW 50501	N
N	5W40 VW 50501	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W30 VW 50700	N

Eng Mgmt System (Stop/Start	Trans in FE Guide (MFR	Trans as listed in FE Guide (derived
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(AV-S1)	Auto(AV-S1)
No	Auto(S8)	Auto(S8)
No	Manual(M6)	Manual(M6)
No	Auto(AV-S1)	Auto(AV-S1)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Manual(M6)	Manual(M6)
No	Auto(AV-S1)	Auto(AV-S1)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(S8)	Auto(S8)
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S7)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(S6)	Auto(S6)
No	Auto(S8)	Auto(S8)
No	Auto(S6)	Auto(S6)
No	Auto(S8)	Auto(S8)
No	Auto(S6)	Auto(S6)
No	Auto(S6)	Auto(S6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(S6)	Auto(S6)
No	Manual(M5)	Manual(M5)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(S6)	Auto(S6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(S6)	Auto(S6)
No	Auto(S6)	Auto(S6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(S6)	Auto(S6)
No	Manual(M5)	Manual(M5)
No	Manual(M6)	Manual(M6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)

No	Auto(S6)	Auto(S6)
No	Manual(M5)	Manual(M5)
No	Auto(S6)	Auto(S6)
No	Manual(M5)	Manual(M5)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Manual(M6)	Manual(M6)
No	Auto(AM-S6)	Automated Manual- Selectable (e.g. Au
No	Auto(S6)	Auto(S6)
No	Manual(M6)	Manual(M6)
No	Auto(S6)	Auto(S6)
No	Auto(S8)	Auto(S8)



Model Type Desc (MFR entered) Charge Depleting Calc Appr CcCharge Depleting Calc Appr Desi

paddles)(AMS6)

A3 frt manual

paddles)(AMS6)

Audi A6 CVT

Audi Q7

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

paddles)(AMS7)

TTCoupe(AMS6)

TTCoupe(AMS6)

TTCoupe(AMS6)

TTRS

paddles)(AMS6)

paddles)(AMS6)

paddles)(AMS6)

CC M6

paddles)(AMS6)

paddles)(AMS6)

paddles)(AMS6)

paddles)(AMS6)

paddles)(AMS6)

Tiguan front

Charge Sustaining Calc Appr CCharge Sustaining Calc Appr De:EPA Calculated Annual Fuel Cost

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



EPA Calculated Gas Guzzler MPG	MFR Calculated Gas Guzzler MPG	EPA Calculated Gas Guzzler Indicator ('
		30.8
		30.4
		30.9
		35.2
		4.2
		33.2
		35.2
		4.2
		4.2
		33.2
		36.9
		26.1
		26.1
		19.3
		29.5
		22.9
		28.1
		23
		22.6
		26.9
		23.5
		26.9
		23.5
		26.4
		25.5
		25.5
		33.3
		33.3
		25.6
		17.2
		23.6
		17.4
		21.8
		17.2
		17.4
		31.8
		31.6
		31.9
		31.5
		30.3
		32.3
		31.8
		25.8
		24.8
		32.4
		33.1
		32.2
		28.5
		34.8
		31.2
		35
		32.6

33.1  
32.2  
33.1  
32.2  
44.6  
46.4  
28.5  
29.9  
26.4  
29.6  
23.3

[illegible]

Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
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Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]; erify Help Desk [verifyhelp@csc.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 6/21/2012 12:04:27 PM  
**Subject:** FW: 2012 Volkswagen Index Derived 5-cycle and Litmus (HLP-2668)  
[VW351\\_780169-09.pdf](#)  
[9VWX09009738 EPA US06.xml](#)

Hello Jim,

The attached US06 EPA confirmatory test only includes one Fuel Economy bag result instead of the required two bags and is preventing the Verify system from calculating a litmus value. This issue is preventing us from submitting fuel economy labels in Verify for 8 different 2013 models, soon to be introduced to the market. Please investigate how to correct this issue as soon as possible and let us know if our involvement is needed.

Regards,

Bill Rodgers  
Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office  
Auburn Hills, MI  
(248) 754-4219  
william.rodgers@vw.com

-----Original Message-----

From: Thomas, Richard (EEO)  
Sent: Thursday, June 21, 2012 6:06 AM  
To: Giles, Michael (EEO); Rodgers, William (EEO)  
Subject: FW: 2012 Volkswagen Index Derived 5-cycle and Litmus (HLP-2668)  
Importance: High

More corrections for the 2.0L TDI test group requiring a new certificate.

-----Original Message-----

From: [REDACTED] Ex. 6 [REDACTED]@csc.com] On Behalf Of Verify Help Desk  
Sent: Wednesday, June 20, 2012 6:27 PM  
To: Thomas, Richard (EEO)  
Subject: Re: 2012 Volkswagen Index Derived 5-cycle and Litmus (HLP-2668)

Hello Mr. Thomas,

Business rule LD-FE-GL-BR119 was returned with your fuel economy label submission because the EPA Highway Litmus Value was not calculated for the Test Group DVWXV02.0U5N. The reason that the EPA Highway Litmus Value was not calculated is because the Test Information Number 9VWX09009738 does not contain a test result for FE BAG 2 (Bag 2 Fuel Economy) which is used in the calculations.

In order to have the EPA Highway Litmus Value calculated you will need to make a Correction for Test

#9VWX09009738 and be sure to add an emission result for FE BAG 2 (Bag 2 Fuel Economy). If you do not have access to the test information submission file you may request a test information dataset report to see the data that should be entered for the Correction. To request a dataset report navigate to: MyCDX > Light-Duty Vehicle & Truck > Vehicle, Fuel Properties, & Tests > Request Dataset Report (in Test Information section).

You will then need to make a Correction to your test group in order for the calculation to be made and for you to see the EPA Highway Litmus Value on your CSI.

After the test group submission is accepted, please make a lock request and answer "Yes" to the question "New Certificate Needed?" You can also add a comment in the comment box above this question that you are requesting a revised certificate for your fuel economy submission.

Please contact your EPA Cert Rep and have them issue the revised certificate.

Please try your fuel economy label submission again and let me know if it is accepted.

**Ex. 6**

Verify Help Desk  
Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

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Verify Help Desk

Sent by: **Ex. 6**

**Ex. 6**

To

"Thomas, Richard (EEO)"

<Richard.Thomas@vw.com>

06/20/2012 11:49

cc

AM

Subject

Re: 2012 Volkswagen Index Derived

5-cycle and Litmus(Document link:

Verify Help Desk)

Hello Mr. Thomas,

We are still looking into this issue. It does appear that you are correct.

Verify did not calculate the EPA Highway Litmus value. We will let you know soon what is required for Verify to do so.

**Ex. 6**

Verify Help Desk

Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

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"Thomas, Richard  
(EEO)"

<Richard.Thomas@v  
w.com> To  
Verify Help Desk@CSC

cc

06/19/2012 02:17

PM Subject

2012 Volkswagen Index Derived

5-cycle and Litmus

Hello **Ex. 6**

I am having difficulty with a number of Diesel concept derived 5-cycle labels due to the following error. The test group DVWXV02.0U5N and CSI information report has no "EPA Highway Litmus Value. I think that may be the cause of the following business rule message.

Transaction Status Details

Transaction Status Identifier : REJECTED Transaction Message Text : LD-FE-GL-BR119 - If Fuel Economy Label Calculation Approach (GL-79) is equal to '5C-DRV' (Derived 5-cycle), and MDPV-Only or ICI Indicator (GL-200) equals 'N' (No), and the Test Group (GL-126) specified in the subconfiguration sales section contains a Test Group Fuel (TG-217.1) equal to 'G' (Gasoline) or 'D' (Diesel), then Test Group (GL-126) must have valid values (non-Null) for EPA City Litmus Value (TG-219.3.1), EPA City Litmus Threshold (TG-219.3.2), EPA Highway Litmus Value (TG-219.4.1), and EPA Highway Litmus Threshold (TG-219.4.2), and EPA City Litmus Value (TG-219.3.1) must be greater than or equal to EPA City Litmus Threshold (TG-219.3.2), and EPA Highway Litmus Value (TG-219.4.1) must be greater than or equal to EPA Highway Litmus Threshold (TG-219.4.2).  
(Base Level IWC = 3500) (Config Index = 1) (SubConfig Index = 1) (Test Group (GL-126) = DVWXV02.0U5N)

Transaction Identifier: \_a784ac70-de02-4aca-870a-d094bd36e386

I have several derived 5-cycle Diesel labels that are in this test group and I need to resolve this as soon as possible.

Best regards,  
Richard

```
<?xml version="1.0" encoding="UTF-8"?>
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United States Environmental Protection Agency

NVFEL

Ann Arbor, Michigan 48105

FAX TO: Len Kata

FAX NUMBER: 248 754-4207

PHONE NUMBER: 248 754-4204

LOCATION: Volkswagen Engineering &amp; Environmental Office

FROM: Bruce Sdunek

FAX NUMBER: 734 214 4869

PHONE NUMBER: 734 214 4733

DIVISION: Certification &amp; Compliance Division

DATE: May 21, 2008

PAGE 1 of 13 PAGES

MESSAGE: Len,

Here are the preliminary results for the VW Diesel.

Bruce Sdunek

Certification and Compliance Division

Environmental Protection Agency

cdrecurred


PAGE 1 OF 13 PAGES

C15D

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to CFEIS Reports for Official Data							
Test Information				Vehicle ID: VW351 780169/09			
Test Number: 2008-0136-001				Vehicle ID: VW351 780169/09			
Test Date: 5/20/2008				MFR Name: VOLKSWAGEN			
Key Start / Hot Soak: 09:59:06 / 09:52				MFR Code: 590			
Operator: 62423				Config #: 00			
Fuel Container ID: F0024C				Transmission: AUTO			
Fuel Type: 19 2007 Cart Diesel (8-12 ppm Sulfur)				Shift Schedule: A09980005			
Test Procedure: 02 CVS 75-Later (w/o Can Load) (ftp3bag)				Odometer: 004377.0 MI			
Calculation Method: Diesel				Drive Schedule: ftp3bag			
Pretest Remarks:				Soak Period: 19.8 hours			
Quality Control: QC Exceptions have been identified and noted							
Bag Data	THC / IntTHC	CO	NOx	CO2	CH4	NonMeth HC	
Phase 1	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	8.926 / 8.956	21.079	0.672	0.744	5.908		
Ambient	2.266	0.264	0.008	0.045	1.914		
Net Concentration	6.786 / 6.817	20.830	0.665	0.702	4.101	1.982	
Remarks: <u>Filt A Excluded from Wgtd</u>							
Phase 2							
Sample	3.505 / 3.435	0.373	0.026	0.467	2.999		
Ambient	2.226	0.091	0.004	0.043	1.901		
Net Concentration	1.357 / 1.286	0.284	0.022	0.425	1.165	-0.087	Warning
Remarks: <u>Filt A Excluded from Wgtd</u>							
Phase 3							
Sample	3.003 / 2.915	0.411	0.197	0.644	2.553		
Ambient	2.333	0.076	0.005	0.042	1.920		
Net Concentration	0.782 / 0.694	0.339	0.192	0.603	0.725	-0.160	Warning
Remarks:							
Phase 4							
Sample							
Ambient							
Net Concentration							
Remarks: <u>This test has particulate results.</u>							
Results	THC / IntTHC	CO	NOx	CO2	CH4	NMHC	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	- / 0.087	0.539	0.025	285.2	0.061	0.025	35.364
Phase 2	- / 0.026	0.012	0.001	275.6	0.028	0.000	36.588
Phase 3	- / 0.009	0.009	0.007	244.6	0.011	0.000	41.388
Weighted	0.03421	0.12039	0.00794	269.557	0.02985	0.00527	
<NMOG=NMHC>							
Fuel Economy	Diesel MPG	<u>Filt A Excluded f</u>			Dyno Settings	Dyno #:	D329
Phase 1	35.54					Inertia:	3750
Phase 2	36.77					EPA Set Co A:	19.38
Phase 3	41.60					EPA Set Co B:	-0.1203
						EPA Set Co C:	0.02109
Weighted	37.65					Front / Rear / DriveTire PSI:	35 / 35 / 35
						Emissions Bench:	D329



NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to CFEIS Reports for Official Data							
Test Number: 2008-0136-001				Vehicle ID: VW351 780169/09			
<b>Results</b>	<b>THC / IntTHC</b>	<b>CO</b>	<b>NOx</b>	<b>CO2</b>	<b>CH4</b>	<b>NMHC</b>	<b>Math Response</b>
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	1.179
Phase 1	- / 0.313	1.930	0.090	1021.5	0.218	0.091	
Phase 2	- / 0.101	0.045	0.005	1060.3	0.106	0.000	
Phase 3	- / 0.032	0.031	0.026	876.4	0.038	0.000	
Phase 4							
<b>Test Conditions</b>							
	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 4</b>			
Barometer (inHg)	28.67	28.67	28.66				
Avg Cell Temp (degF)	71.70	71.76	71.67				
Dew Point (degF)	47.54	46.90	46.20				
Specific Humidity (grains/lbm)	50.95	49.72	48.41				
NOx Corr Factor	0.8984	0.8938	0.8889				
CO2 Dilution Factor	17.946	28.693	20.806				
CFV Vmix (scf @68F)	2787.69	4773.81	2780.80				
Total Vmix (scf@68F)	2809.90	4812.04	2803.01				
CVS Flow Rate Avg (scfm)	330.29	329.27	329.15				
CVS-SFV Exh Flow Avg (scfm)							
Fan Placement: One Fan - Up - Front							
Phase Time (secs)	506.40	869.90	506.90				
Distance (miles)	3.582	3.833	3.583				
Bag Analysis Time (secs)	950.4	147.9	89.3				
<b>Data Quality Flags</b>							
QC Exceptions have been identified and noted							
QC EXCEPTION: -PSU A Exception - -							
2/5 checks OK 5-21-08 Filter A is excluded as shown in remarks 05/21/08							
<b>MFR Test Results</b> for Procedure 2 CVS 75 AND LATER (W/O CAN. LOAD)							
<b>MFR Number</b>	<b>HC</b>	<b>CO</b>	<b>NOx</b>	<b>CO2</b>	<b>NMOG</b>	<b>NonMeth HC</b>	
1084705	0.0437	0.02	0.022	274	0	0.0034	
<b>Odometer</b>	<b>MPG</b>						
4142 M	37.1						
MPG is -1.45 % lower than EPA MPG							
MFR Lab: Volkswagen AG, Dept. E/TZ-TZ D9280 Wolfsburg 1, Germany							
Dyno: 08							
Fuel: 19 CERT DIESEL (8 - 15 PPM SULFUR)							
I have validated the data in accordance with the requirements of TP 730							
Validated By: 62423 Date: 5-21-08							

NVFEL Laboratory Test Data						PARTICULATE	
Final Laboratory Test Results- Refer to CFEIS Reports for Official Data							
Test Information				Vehicle ID: VW351 780169/09			
	Test Date: 5/20/2008		MFR Name: VOLKSWAGEN				
	Key Start: 09:59:06 / 09:52		MFR Code: 590				
	Operator: 62423		Config #: 00				
	Fuel Container ID: F0024C		Transmission: AUTO				
	Fuel Type: 19 2007 Cert Diesel (8-12 ppm Sulfur)		Shift Schedule: A09980005				
	Test Procedure: 02 CVS 75-Later (w/o Can Load) (ftp3bag)		Odometer: 004377.0 MI				
Calculation Method: Diesel		Drive Schedule: ftp3bag					
Pretest Remarks:		Soak Period: 19.8 hours					
Quality Control: QC Exceptions have been identified and noted							
Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / ml
Phase 1	A	8004710	146.6294	146.6693	0.03954	15.096	4.214
	B	8004711	153.5917	153.6318	0.03972	15.039	4.198
	C	8004712	148.0566	148.0937	0.03674	13.903	3.881
Remarks:		Filt A Excluded from Wghtd					
Phase 2	A	8004713	150.3360	150.3400	0.00359	1.365	0.356
	B	8004714	150.0153	150.0196	0.00389	1.466	0.382
	C	8004715	149.1184	149.1231	0.00430	1.619	0.422
Remarks:		Filt A Excluded from Wghtd					
Phase 3	A	8004716	145.3921	145.3962	0.00371	1.403	0.392
	B	8004717	149.4850	149.4834	0.00000	0.000	0.000
	C	8004718	146.2069	146.2100	0.00270	1.025	0.286
Remarks:							
Phase 4							
Remarks:		This test has particulate results.					
Average Results					Net Wt mg	Total Mass mg	Total Mass mg / ml
Phase 1					0.03867	14.471	4.040
Phase 2					0.00393	1.542	0.402
Phase 3					0.00214	1.214	0.339
Weighted: derived from filters in sampler A:							1.18725
Weighted: derived from filters in sampler B:							1.06972
Weighted: derived from filters in sampler C:							1.10341
Weighted All Filters:							1.14048
Reference Filter Stability Check					Net Wt mg	Stability Check	Dyno #: D329
2% of Avg Net or 0.01 mg		No.	Tare (Pre Wt)	Gross (Post Wt)	mg	PASS/FAIL	Inertia: 3750
0.01		1	149.21840	149.21700	-0.00140	PASS	EPA Set Co A: 18.38
		2	148.21290	148.21230	-0.00060	PASS	EPA Set Co B: -0.1203
							EPA Set Co C: 0.02109
							DriveTire PSI: 35 / 35 / 35
							Emissions Bench D329
v080204 - d329 EPAVDAEm080520092718 Page 1 of 2 Print Time 21-May-2008 09:17							

NVFEL Laboratory Test Data						PARTICULATE
Final Laboratory Test Results- Refer to CFEIS Reports for Official Data						
Test Number: 2008-0136-001				Vehicle ID: VW351 780169/08		
<b>WEIGHING CHAMBER</b>						
	Date	Time	Operator (id)	Chamber Temp (°F)	Humidity (%)	Last Change in Status Status @ timestamp
Pre-test	5/19/08	12:48:00	021616	71.4	44.3	NORM @ 05/19/08 10:37:28
Post-test	5/20/08	13:00:00	021616	71.3	45	NORM @ 05/19/08 10:37:28
<b>Test Conditions</b>						
		Phase 1	Phase 2	Phase 3	Phase 4	
Barometer (InHg)		28.67	28.67	28.66		
Avg Cell Temp (degF)		71.70	71.76	71.67		
Dew Point (degF)		47.54	46.90	46.20		
Specific Humidity (grains/lbm)		50.95	49.72	48.41		
NOx Corr Factor		0.8984	0.8938	0.8889		
Dilution Factor		17.95	28.69	20.81		
CFV Vmix (scf @68F)		2787.69	4773.81	2780.80		
Sample Volume A (scf @68F)		7.361	12.671	7.407		
Sample Volume B (scf @68F)		7.422	12.789	7.414		
Sample Volume C (scf @68F)		7.425	12.771	7.382		
Sample Volume Average (scf @68F)		7.402	12.743	7.404		
Total Vmix (scf @68F)		2809.90	4812.04	2803.01		
Phase Time (sec)		508.40	869.90	506.90		
Distance (miles)		3.582	3.833	3.583		
						Min/Max Limit Checks
PSU Probe A (degC)		61.5	61.5	61.5		
PSU Probe B (degC)		34.3	34.3	34.4		
PSU Probe C (degC)		34.3	34.3	34.4		
PSU Dil Air A (degC)		39.5	39.1	39.1		
PSU Dil Air B (degC)		32.4	37.8	37.9		
PSU Dil Air C (degC)		40.8	40.1	39.9		
PSU Filter A (degC)		43.1	42.0	43.5		P1 41.7/- P2 41.0/-
PSU Filter B (degC)		44.9	47.0	45.5		
PSU Filter C (degC)		45.2	44.8	44.7		
PSU Dil Flow A (lpm)		25.1	25.1	25.0		
PSU Dil Flow B (lpm)		25.0	24.9	25.0		
PSU Dil Flow C (lpm)		25.0	24.9	25.1		
PSU A Proportionality						
PSU B Proportionality						
PSU C Proportionality						
<p><u>Data Quality Flags</u> Filter room ambient conditions were within QC limits; Filter net weights include buoyancy corrections.</p> <p>QC Exceptions have been identified and noted</p> <p><b>QC EXCEPTION: -PSU A Exception -</b> Filter A is excluded as shown in remarks 05/21/08</p> <p>I have validated the data in accordance with the requirements of TP 730</p> <p>Validated By: <u>62423</u> Date: <u>5-21-08</u></p>						

CISD

## NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to CFEIS Reports for Official Data

Test Number: 2008-0136-002

Vehicle ID: VW351 780169/09

## Test Information



Test Date: 5/20/2008

Key Start: 11:18:19

Operator: 62423

Fuel Container ID: F0024C

Fuel Type: 19 2007 Cert Diesel (8-12 ppm Sulfur)

Test Procedure: 03 HWFET (hwfetprep\_hwfet)

Calculation Method: Diesel

Pretest Remarks:

MFR Name: VOLKSWAGEN

MFR Code: 590

Config #: 00

Transmission: AUTO

Shift Schedule: A09980011

Odometer: 004388.0 MI

Drive Schedule: hwfet\_hwfet

## Quality Control:

QC Exceptions have been identified and noted

## Bag Data

## Phase 1

	THC / IntTHC (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)	
Sample	2.455 / 2.335	0.431	0.163	0.624	2.172		
Ambient	2.219	0.057	0.004	0.042	1.913		
Net Concentration	0.340 / 0.219	0.377	0.159	0.585	0.348	-0.191	Warning

Remarks:

## Phase 2

Sample  
Ambient  
Net Concentration

Remarks:

## Phase 3

Sample  
Ambient  
Net Concentration

Remarks:

## Phase 4

Sample  
Ambient  
Net Concentration

Remarks: This test has particulate results.

## Results

	THC / IntTHC (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC (gpm)	Vol MPG (mpg)
Phase 1	- / 0.002	0.007	0.005	181.2	0.004	0.000	55.876


&lt;NMOG=NMHC&gt;

## Fuel Economy

Phase 1 Diesel MPG  
56.16

19.22	Dyno Settings	Dyno #: D329
19.26		Inertia: 3750
19.26		EPA Set Co A: 18.38
19.26		EPA Set Co B: -0.1203
19.28		EPA Set Co C: 0.02109
	Front / Rear / Drive Tire PSI:	35 / 35 / 35
19.25	Emissions Bench:	D329

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to CFEIS Reports for Official Data							
Test Number: 2008-0136-002				Vehicle ID: VW351 780169/09			
<b>Results</b>	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	1.179
Phase 1	- / 0.022	0.076	0.047	1854.6	0.040	0.000	
Phase 2							
Phase 3							
Phase 4							



Test Conditions	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (InHg)	28.66			
Avg Cell Temp (degF)	71.47			
Dew Point (degF)	46.53			
Specific Humidity (grains/lbm)	49.03			
NOx Corr Factor	0.8912			
CO2 Dilution Factor	21.448			
CFV Vmix (scf @68F)	6088.57			
Total Vmix (scf@68F)	6122.04			
CVS Flow Rate Avg (scfm)	477.47			
CVS-SFV Exh Flow Avg (scfm)				
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	765.10			
Distance (miles)	10.237			
Bag Analysis Time (secs)	311.6			

Data Quality Flags      QC Exceptions have been identified and noted *Z/s checks OK MP 5-21-08*

MFR Test Results for Procedure 3 HWFE (HIGHWAY TEST)

<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>
1084706	0.0088	0	0.005	184	0	0.0004

Odometer      MPG

4153 M      55.3

MPG is -1.53 % lower than EPA MPG

MFR Lab: Volkswagen AG, Dept. E/TZ-TZ  
D3280 Wolfsburg 1, Germany

Dyno: 08


Fuel: 19 CERT DIESEL (8 - 15 PPM SULFUR)

I have validated the data in accordance with the requirements of TP 730

Validated By: 62423

Date: 5-21-08

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NVFEL Laboratory Test Data						PARTICULATE		
Final Laboratory Test Results- Refer to CFEIS Reports for Official Data								
Test Information				Vehicle ID: VW351 780169/09				
	Test Date: 5/20/2008		MFR Name: VOLKSWAGEN					
	Key Start: 11:18:19		MFR Code: 690					
	Operator: 62423		Config #: 00					
	Fuel Container ID: F0024C		Transmission: AUTO					
	Fuel Type: 19 2007 Cert Diesel (8-12 ppm Sulfur)		Shift Schedule: A09980011					
	Test Procedure: 03 HWFET (hwfetestprep_hwfet)		Odometer: 004388.0 MI					
Calculation Method: Diesel				Drive Schedule: hwfetest_hwfet				
Pretest Remarks:								
Quality Control: QC Exceptions have been identified and noted								
Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / ml	Filter comment
Phase 1	A	8004707	144.9075	144.9112	0.00305	1.685	0.165	
	B	8004708	146.8781	146.8831	0.00435	2.371	0.232	
	C	8004709	148.4210	148.4243	0.00264	1.447	0.141	
Remarks:								
Phase 2								
Remarks:								
Phase 3								
Remarks:								
Phase 4								
Remarks: This test has particulate results.								
Average Results					Net Wt mg	Total Mass mg	Total Mass mg / ml	
Phase 1					0.00335	1.834	0.179	
Reference Filter Stability Check								
2% of Avg Net or 0.01 mg		No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Stability Check	Dyno #: D329	
0.01		1	149.21590	149.21750	0.00160	PASS	Inertia: 3750	
		2	146.21010	146.21370	0.00360	PASS	EPA Set Co A: 18.38	
							EPA Set Co B: -0.1203	
							EPA Set Co C: 0.02108	
							DriveTire PSI: 35 / 35 / 35	
							Emissions Bench D329	
v080204 - d329 EPAVDAEm080520104809 Page 1 of 2 Print Time 21-May-2008 08:17								

NVFEL Laboratory Test Data						PARTICULATE
Final Laboratory Test Results- Refer to CFEIS Reports for Official Data						
Test Number: 2008-0136-002						Vehicle ID: VW351 780169/09
WEIGHING CHAMBER		Operator	Chamber Temp	Humidity	Last Change in Status	
Date	Time	(Id)	(°F)	(%)	Status @ timestamp	
Pre-test	5/19/08	11:54:00	021616	71.2	43.6	NORM @ 05/19/08 10:37:28
Post-test	5/20/08	13:53:00	021616	71.5	44.9	NORM @ 05/19/08 10:37:28
<u>Test Conditions</u>		<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>	
Barometer (InHg)		28.88				
Avg Cell Temp (degF)		71.47				
Dew Point (degF)		46.53				
Specific Humidity (grains/lbm)		49.03				
NOx Corr Factor		0.8912				
Dilution Factor		21.45				
CFV Vmix (scf @68F)		6088.57				
Sample Volume A (scf @68F)		11.095				
Sample Volume B (scf @68F)		11.222				
Sample Volume C (scf @68F)		11.158				
Sample Volume Average (scf @68F)		11.158				
Total Vmix (scf @68F)		6122.04				
Phase Time (sec)		765.10				
Distance (miles)		10.237				
					Min/Max Limit Checks	
PSU Probe A (degC)		61.6				
PSU Probe B (degC)		34.9				
PSU Probe C (degC)		34.9				
PSU DII Air A (degC)		39.5				
PSU DII Air B (degC)		36.7				
PSU DII Air C (degC)		40.3				
PSU Filter A (degC)		44.4				
PSU Filter B (degC)		49.9				
PSU Filter C (degC)		44.1				
PSU DII Flow A (lpm)		25.0				
PSU DII Flow B (lpm)		24.9				
PSU DII Flow C (lpm)		24.9				
PSU A Proportionality						
PSU B Proportionality						
PSU C Proportionality						
<u>Data Quality Flags</u> Filter room ambient conditions were within QC limits; Filter net weights include buoyancy corrections. QC Exceptions have been identified and noted <i>2/3 checks OK MP 5-21-08</i> *** I have validated the data in accordance with the requirements of TP 730 Validated By: <u>62423</u> Date: <u>5-21-08</u>						

v080204 - d328

EPAVDAEm080520104808


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Print Time 21-May-2008 09:17

C15D

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to CFEIS Reports for Official Data							
Test Number: 2008-0136-003				Vehicle ID: VW351 780169/09			
Test Date: 5/20/2008				MFR Name: VOLKSWAGEN			
Key Start: 12:30:49				MFR Code: 590			
Operator: 62423				Config #: 00			
Fuel Container ID: F0024C				Transmission: AUTO			
Fuel Type: 19 2007 Cert Diesel (8-12 ppm Sulfur)				Shift Schedule: A09980041			
Test Procedure: 90 US06 (us06warmup_us06)				Odometer: 004413.0 MI			
Calculation Method: Diesel				Drive Schedule: us06_us06			
Pretest Remarks:							
Quality Control: This data meets all automated quality control checks. No problems were identified.							
<b>Bag Data</b>							
	THC / IntTHC	CO	NOx	CO2	CH4	NonMeth HC	
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
<b>Phase 1</b>							
Sample	10.979 / 11.730	0.848	3.663	0.871	9.666		
Ambient	2.266	0.111	0.039	0.042	1.908		
Net Concentration	8.870 / 9.621	0.745	3.627	0.832	7.884	0.325	
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks: This test has particulate results.							
<b>Results</b>							
	THC / IntTHC	CO	NOx	CO2	CH4	NMHC	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	- / 0.111	0.017	0.125	303.5	0.105	0.004	33.322
<NMOG>NMHC>							
<b>Fuel Economy</b>							
	Diesel MPG	Dyno Settings					
Phase 1	33.49	Dyno #: D329					
		Inertia: 3750					
		EPA Set Co A: 18.38					
		EPA Set Co B: -0.1203					
		EPA Set Co C: 0.02109					
		Front / Rear / DriveTire PSI: 35 / 35 / 35					
		Emissions Bench: D329					
v080204 - d329 EPAVDAEm080520120332 Page 1 of 2 Print Time 20-May-2008 15:15							



NVFEL Laboratory Test Data								CVS
Final Laboratory Test Results- Refer to CFEIS Reports for Official Data								
Test Number: 2008-0138-003				Vehicle ID: VW351 780169/09				
	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>	
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	1.179	
	Phase 1	- / 0.885	0.138	0.996	2427.2	0.839	0.030	
	Phase 2							
	Phase 3							
Phase 4								
<b>Test Conditions</b>								
	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>				
Barometer (InHg)	28.65							
Avg Cell Temp (degF)	71.13							
Dew Point (degF)	47.84							
Specific Humidity (grains/lbm)	51.55							
NOx Corr Factor	0.9007							
CO2 Dilution Factor	15.360							
CFV Vmix (scf @68F)	5607.58							
Total Vmix (scf@68F)	5633.84							
CVS Flow Rate Avg (scfm)	556.90							
CVS-SFV Exh Flow Avg (scfm)								
Fan Placement: US08 Only - One Large Fan - Down - Front								
Phase Time (secs)	602.00							
Distance (miles)	7.989							
Bag Analysis Time (secs)	87.5							
<b>Data Quality Flags</b>								
This data meets all automated quality control checks. No problems were identified.								
<b>MFR Test Results</b> for Procedure 90 US08								
<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>		
1084707	0	0	0	0	0	0		
<u>Odometer</u>	<u>MPG</u>							
4174 M	0							
MFR Lab: Volkswagen AG, Dept. E/TZ-TZ								
D3280 Wolfsburg 1, Germany								
Dyno: 13								
Fuel: 19 CERT DIESEL (8 - 15 PPM SULFUR)								
I have validated the data in accordance with the requirements of TP 730								
Validated By: <u>62423</u> Date: <u>5-21-08</u>								

NVFEL Laboratory Test Data						PARTICULATE		
Final Laboratory Test Results - Refer to CFEIS Reports for Official Data								
Test Information		Test Number: 2008-0136-003			Vehicle ID: VW351 780169/09			
	Test Date: 5/20/2008			MFR Name: VOLKSWAGEN				
	Key Start: 12:30:49			MFR Code: 590				
	Operator: 82423			Config #: 00				
	Fuel Container ID: F0024C			Transmission: AUTO				
	Fuel Type: 19 2007 Cert Diesel (8-12 ppm Sulfur)			Shift Schedule: A09980041				
	Test Procedure: 90 US08 (us06warmup_us06)			Odometer: 004413.0 MI				
Calculation Method: Diesel			Drive Schedule: us06_us06					
Pretest Remarks:								
Quality Control: This data meets all automated quality control checks. No problems were identified.								
Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / ml	Filter comment
<b>Phase 1</b>								
	A	8007423	145.3743	145.3777	0.00281	1.810	0.226	
	B	8007424	142.8005	142.8019	0.00082	0.525	0.066	
	C	8007425	149.5182	149.5211	0.00229	1.471	0.184	
Remarks:								
<b>Phase 2</b>								
Remarks:								
<b>Phase 3</b>								
Remarks:								
<b>Phase 4</b>								
Remarks: This test has particulate results.								
<b>Average Results</b>					Net Wt mg	Total Mass mg	Total Mass mg / ml	
Phase 1					0.00197	1.269	0.159	
<b>Reference Filter Stability Check</b>								
2% of Avg Net or 0.01 mg		No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Stability Check PASS/FAIL	Dyno #: D329	
0.01		1	149.22050	149.21810	-0.00240	PASS	Inertia: 3750	
		2	146.21540	146.21270	-0.00270	PASS	EPA Set Co A: 18.38	
							EPA Set Co B: -0.1203	
							EPA Set Co C: 0.02109	
							DriveTire PSI: 35 / 35 / 35	
							Emissions Bench D329	
v080204 - d329 EPAVDAEm060520120332			/ Page 1 of 2			Print Time 20-May-2008 15:15		

NVFEL Laboratory Test Data						PARTICULATE
Final Laboratory Test Results - Refer to CFEIS Reports for Official Data						
Test Number: 2008-0136-003						
Vehicle ID: VW351 780169/09						
<b>WEIGHING CHAMBER</b>						
	Date	Time	Operator (id)	Chamber Temp (°F)	Humidity (%)	Last Change in Status Status @ timestamp
<b>Pre-test</b>	5/19/08	11:32:00	021616	71.7	43.6	NORM @ 05/19/08 10:37:28
<b>Post-test</b>	5/20/08	14:12:00	021616	71.8	44.1	NORM @ 05/19/08 10:37:28
<b>Test Conditions</b>						
			Phase 1	Phase 2	Phase 3	Phase 4
	Barometer (inHg)		28.65			
	Avg Cell Temp (degF)		71.13			
	Dew Point (degF)		47.84			
	Specific Humidity (grains/lbm)		51.55			
	NOx Corr Factor		0.9007			
	Dilution Factor		15.36			
	CFV Vmix (scf @68F)		5607.58			
	Sample Volume A (scf @68F)		8.738			
	Sample Volume B (scf @68F)		8.753			
	Sample Volume C (scf @68F)		8.769			
	Sample Volume Average (scf @68F)		8.753			
	Total Vmix (scf @68F)		5633.84			
	Phase Time (sec)		602.00			
	Distance (miles)		7.999			
						Min/Max Limit Checks
	PSU Probe A (degC)		61.5			
	PSU Probe B (degC)		35.3			
	PSU Probe C (degC)		35.8			
	PSU Dil Air A (degC)		39.1			
	PSU Dil Air B (degC)		36.1			
	PSU Dil Air C (degC)		39.5			
	PSU Filter A (degC)		45.3			
	PSU Filter B (degC)		45.3			
	PSU Filter C (degC)		45.1			
	PSU Dil Flow A (lpm)		24.7			
	PSU Dil Flow B (lpm)		24.7			
	PSU Dil Flow C (lpm)		24.7			
	PSU A Proportionality					
	PSU B Proportionality					
	PSU C Proportionality					
<b>Data Quality Flags</b> Filter room ambient conditions were within QC limits; Filter net weights include buoyancy corrections.						
This data meets all automated quality control checks. No problems were identified.						
---						
I have validated the data in accordance with the requirements of TP 730						
Validated By: <u>62423</u> Date: <u>5-21-08</u>						

V080204 - d329 EPAVDAEm080820120932

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VWX

VW351 780169/09

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D329

U

THIS TEST HAS PARTICULATE RESULTS. [NMOG=NMHC] TSD-LCS TEST#: (8) 13-6003, EPA FE  
Calc Rel8

HC-NM+NOX

0.1283183

NOX

0.1245747

CO2

303.456902

HC-NM

0.0037436

PM

0.0001587

MFR FE

33.5

NMOG

0.0037436

FE BAG 1

33.49

METHANE

0.1048967

HC-TOTAL

0.1106565

CO

0.0172903

20101004

US06

D

US06

33.5411

33.5

HC-NM+NOX

0.1283183

NOX

0.1245747

CO2

303.456902

HC-NM

0.0037436

PM

0.0001587

MFR FE

33.5

NMOG

0.0037436

FE BAG 1

33.49

METHANE

0.1048967

HC-TOTAL

0.1106565

CO

0.0172903

**To:** CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 6/21/2012 9:49:28 PM  
**Subject:** VW certificate

Joel, VW is re-submitting a certificate after having to change a test number so Verify can do the Litmus test. It hasn't shown up yet so go ahead and approve if it appears friday while i'm out. You can talk to Bill if any questions about it., if it appears.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov



**To:** CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Rodgers, William" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 6/21/2012 9:49:28 PM  
**Subject:** VW certificate

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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 6/22/2012 7:39:11 PM  
**Subject:** VW Group - Audi Q5 2.0L TFSI Decision Information

Hello Jim,

Today we submitted a decision information dataset for a new exhaust EDV as a carryover test group for the Audi Q5 2.0L TFSI.

Note, at this is a non- FFV version of the Q5 (same as MY 2012). The FFV version will be classified under a separate test group as discussed in the cert-preview letter. At the time of the preview letter, this non FFV version was not planned, but was later required until the FFV is ready.

Please let us know if you have any questions.

On a second topic, to follow up on the Jetta Hybrid confirmatory test: I had a problem submitting the supplemental information, and I have an open ticket to the help desk to resolve. So, a minor delay in this step for now.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 6/25/2012 11:10:25 AM  
**Subject:** RE: VW certificate  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Jim,

The Verify system didn't require a new Certificate to process the FE litmus after the test number was changed to the factory 2-bag test. I'm not sure if a new Certificate request is needed. Any idea?

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, June 21, 2012 5:49 PM  
To: Joel Dalton  
Cc: Rodgers, William (EEO)  
Subject: VW certificate

Joel, VW is re-submitting a certificate after having to change a test number so Verify can do the Litmus test. It hasn't shown up yet so go ahead and approve if it appears friday while i'm out. You can talk to Bill if any questions about it., if it appears.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 6/25/2012 7:19:57 PM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
<mailto:Snyder.Jim@epamail.epa.gov>  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Snyder.Jim@epamail.epa.gov>  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hi Jim,

Just to follow up, I finally managed to get the supplemental information accepted today for the Jetta Hybrid confirmatory test.

Please advise of the test date at your earliest convenience.

Thanks,

Mike

From: Giles, Michael (EEO)  
Sent: Wednesday, June 20, 2012 9:33 AM  
To: 'Jim Snyder'  
Cc: Rodgers, William  
Subject: RE: VW Group - Decision Info 1.4L Jetta Hybrid

Hi Jim,

The decision information for the Jetta Hybrid has been corrected to include the evaporative tests, as well as 3 additional supporting FTP tests.

Sorry about the omission, I was under the idea that the d.i. was relevant only for exhaust tests.

Regards,

Mike

From: Giles, Michael (EEO)  
Sent: Wednesday, June 20, 2012 8:56 AM  
To: 'Jim Snyder'  
Subject: RE: VW Group - Decision Info 1.4L Jetta Hybrid

Jim,

I will input the evaporative tests soon, sorry about the omission.

Regards

Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, June 20, 2012 8:24 AM  
To: Giles, Michael (EEO)  
Subject: RE: VW Group - Decision Info 1.4L Jetta Hybrid

On page 2 and page 6 it mentions a 1.4L TFSI plug-in hybrid Jetta. It doesn't specify the test group # on those pages but I see no other on the chart.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>

Date: 06/20/2012 08:14 AM  
Subject: RE: VW Group - Decision Info 1.4L Jetta Hybrid

Hi Jim,

I just checked our copy of the MY 2013 pre-certification document, and did not see any mention of plug in (looking at the table of page 10 ). The vehicle is clearly described a standard HEV in our data set we received.

If you do have a plug in described, can you tell me where so we can resolve or correct if necessary?

Thanks  
Mike

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, June 19, 2012 4:46 PM  
To: Giles, Michael (EEO)  
Subject: RE: VW Group - Decision Info 1.4L Jetta Hybrid

Are you positive? The cert preview document lists this vehicle and test group as a 1.4L TFSI with plug-in hybrid technology . Did they change it since October?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 06/19/2012 04:38 PM  
Subject: RE: VW Group - Decision Info 1.4L Jetta Hybrid

No plug in, I believe it is a standard "HEV" because there is no outside power source other than the fuel.

The available date is September 17th.

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, June 19, 2012 4:33 PM  
To: Giles, Michael (EEO)

Cc: Rodgers, William (EEO)  
Subject: Re: VW Group - Decision Info 1.4L Jetta Hybrid

Is this a plug-in hybrid? When will it be available for testing?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/19/2012 03:45 PM  
Subject: VW Group - Decision Info 1.4L Jetta Hybrid

Hello Jim,

I just submitted a decision request for the new 1.4L Jetta Hybrid (1.4L), for test group DVXXV01.4PHE.

This vehicle has new technology all around (engine, evaporative family, OBD system, ORVR system). Our understanding is that EPA will most likely want to do confirmatory tests.

Please let me know if you have any questions processing this request.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207



**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Mon 6/25/2012 9:14:48 PM  
**Subject:** 2013 FE Guide - VW Group data attached  
VW Group - 2013 FE Guide-rel10-all rel dates-no-sales-6-25-2012.xlsx

Richard,

Here's the 2013 data in Verify as of 6/25/2012 10AM or so. I didn't check it over with a fine tooth comb, but the macro came up with a few errors

Dave

EPA comme	VERIFY	Model	Mfr Name (blue	Division	Carline	Verif	Index (Eng
		2013	Audi	Audi	A3	ADX	59 2.0
Diesel;		2013	Audi	Audi	A3	ADX	73 2.0
		2013	Audi	Audi	A3	ADX	58 2.0
		2013	Audi	Audi	A3 quattro	ADX	60 2.0
		2013	Audi	Audi	A4	ADX	35 2.0
Error -- gas (Y		2013	Audi	Audi	A4 quattro	ADX	37 2.0
		2013	Audi	Audi	A4 quattro	ADX	40 2.0
		2013	Audi	Audi	A5 Cabriolet	ADX	36 2.0
Error -- gas (Y		2013	Audi	Audi	A5 Cabriolet quattro	ADX	39 2.0
Error -- gas (Y		2013	Audi	Audi	A5 quattro	ADX	38 2.0
		2013	Audi	Audi	A5 quattro	ADX	41 2.0
		2013	Audi	Audi	A6	ADX	65 2.0
Error -- gas (Y		2013	Audi	Audi	A6 quattro	ADX	70 2.0
		2013	Audi	Audi	A6 quattro	ADX	77 3.0
		2013	Audi	Audi	A7 quattro	ADX	76 3.0
Relabeled. Please inc		2013	Audi	Audi	A8	ADX	128 3.0
Relabeled. Please inc		2013	Audi	Audi	A8L	ADX	129 3.0
		2013	Audi	Audi	A8L	ADX	109 6.3
		2013	Audi	Audi	allroad quattro	ADX	134 2.0
		2013	Audi	Audi	Q7	ADX	61 3.0
Diesel;		2013	Audi	Audi	Q7	ADX	53 3.0
		2013	Audi	Audi	RS5	ADX	49 4.2
		2013	Audi	Audi	RS5 Cabriolet	ADX	52 4.2
		2013	Audi	Audi	S4	ADX	42 3.0
		2013	Audi	Audi	S4	ADX	45 3.0
		2013	Audi	Audi	S5	ADX	43 3.0
		2013	Audi	Audi	S5	ADX	46 3.0
		2013	Audi	Audi	S5 Cabriolet quattro	ADX	44 3.0
		2013	Audi	Audi	S6	ADX	48 4.0
		2013	Audi	Audi	S7	ADX	47 4.0
		2013	Audi	Audi	TT Coupe quattro	ADX	66 2.0
		2013	Audi	Audi	TT Roadster quattro	ADX	67 2.0
		2013	Audi	Audi	TTRS Coupe	ADX	69 2.5
		2013	Bentley	Bentley Motors L	Continental Flying Spur	BEX	110 6.0
		2013	Bentley	Bentley Motors L	Continental GT	BEX	108 4.0
		2013	Bentley	Bentley Motors L	Continental GT	BEX	113 6.0
		2013	Bentley	Bentley Motors L	Continental GTC	BEX	107 4.0
		2013	Bentley	Bentley Motors L	Continental GTC	BEX	111 6.0
		2013	Bentley	Bentley Motors L	Continental Supersports Conv	BEX	112 6.0
		2013	Lamborghini	Lamborghini	Gallardo Coupe	NLX	30 5.2
		2013	Lamborghini	Lamborghini	Gallardo Coupe	NLX	32 5.2
Error in comlY		2013	Lamborghini	Lamborghini	Gallardo Spyder	NLX	31 5.2
		2013	Lamborghini	Lamborghini	Gallardo Spyder	NLX	33 5.2
		2013	Volkswagen	Volkswagen	BEETLE	VWX	19 2.0
Diesel;		2013	Volkswagen	Volkswagen	BEETLE	VWX	84 2.0
		2013	Volkswagen	Volkswagen	BEETLE	VWX	17 2.5
		2013	Volkswagen	Volkswagen	BEETLE	VWX	27 2.5
		2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	VWX	20 2.0
Diesel;		2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	VWX	85 2.0
		2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	VWX	18 2.5
		2013	Volkswagen	Volkswagen	CC	VWX	1 2.0
		2013	Volkswagen	Volkswagen	CC	VWX	4 2.0

	2013	Volkswagen	Volkswagen	CC	VWX	2	3.6
	2013	Volkswagen	Volkswagen	CC 4MOTION	VWX	3	3.6
	2013	Volkswagen	Volkswagen	Eos	VWX	21	2.0
Diesel;	2013	Volkswagen	Volkswagen	GOLF	VWX	72	2.0
Diesel;	2013	Volkswagen	Volkswagen	GOLF	VWX	81	2.0
	2013	Volkswagen	Volkswagen	GOLF	VWX	16	2.5
	2013	Volkswagen	Volkswagen	GOLF	VWX	26	2.5
	2013	Volkswagen	Volkswagen	Golf R	VWX	57	2.0
	2013	Volkswagen	Volkswagen	GTI	VWX	22	2.0
	2013	Volkswagen	Volkswagen	GTI	VWX	23	2.0
	2013	Volkswagen	Volkswagen	Jetta	VWX	50	2.0
Diesel;	2013	Volkswagen	Volkswagen	Jetta	VWX	71	2.0
	2013	Volkswagen	Volkswagen	Jetta	VWX	51	2.0
Diesel;	2013	Volkswagen	Volkswagen	Jetta	VWX	80	2.0
	2013	Volkswagen	Volkswagen	Jetta	VWX	15	2.5
	2013	Volkswagen	Volkswagen	Jetta	VWX	25	2.5
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORTWAGEN	VWX	74	2.0
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORTWAGEN	VWX	79	2.0
	2013	Volkswagen	Volkswagen	JETTA SPORTWAGEN	VWX	14	2.5
	2013	Volkswagen	Volkswagen	JETTA SPORTWAGEN	VWX	24	2.5
Diesel;	2013	Volkswagen	Volkswagen	Passat	VWX	62	2.0
Diesel;	2013	Volkswagen	Volkswagen	Passat	VWX	64	2.0
	2013	Volkswagen	Volkswagen	Passat	VWX	83	2.5
	2013	Volkswagen	Volkswagen	Passat	VWX	82	2.5
	2013	Volkswagen	Volkswagen	Passat	VWX	63	3.6
	2013	Volkswagen	Volkswagen	TIGUAN	VWX	68	2.0
	2013	Volkswagen	Volkswagen	TIGUAN	VWX	56	2.0
	2013	Volkswagen	Volkswagen	TIGUAN 4MOTION	VWX	55	2.0
Diesel;	2013	Volkswagen	Volkswagen	TOUAREG	VWX	54	3.0
	2013	Volkswagen	Volkswagen	TOUAREG	VWX	78	3.6
Hybrid;	2013	Volkswagen	Volkswagen	Touareg Hybrid	VWX	75	3.0

City Hwy Cor				Low	Low	Low	City	Una	Hwy	Una	Comb	Ur	City	Unrd	Adj	FE - Cor
4Auto(AM-S6)	21	28	24					26.6		38.2	30.8	102				21.3388
4Auto(AM-S6)	30	42	34					39.0935	59.3437	46.1856						29.8946
4Manual(M6)	21	30	24					25.3		40.3	30.3	902				20.8146
4Auto(AM-S6)	21	28	24					27.2		37.1	30.9	119				20.891
4Auto(AV-S8)	24	31	26					30.1185	44.4328	35.2251						23.6355
4Auto(S8)	20	30	24					25.6856	40.5676	30.7641						20.3576
4Manual(M6)	22	32	26					27.624	43.9699	33.1736						22.2425
4Auto(AV-S8)	24	31	26					30.1185	44.4328	35.2251						23.6355
4Auto(S8)	20	30	24					25.6856	40.5676	30.7641						20.3576
4Auto(S8)	20	30	24					25.6856	40.5676	30.7641						20.3576
4Manual(M6)	22	32	26					27.624	43.9699	33.1736						22.2425
4Auto(AV-S8)	25	33	28					31.4	46.9	36.8857						24.5044
4Auto(S8)	20	30	24					25.6856	40.5676	30.7641						20.3576
6Auto(S8)	18	27	22					23.1369	38.1	28.1037						18.3949
6Auto(S8)	18	28	21					22.5575	37.3745	27.4556						17.8058
6Auto(S8)	18	28	21					22.5575	37.3745	27.4556						17.8058
6Auto(S8)	18	28	21					22.5575	37.3745	27.4556						17.8058
6Auto(S8)	18	28	21					22.5575	37.3745	27.4556						17.8058
12Auto(S8)	13	21	16					15.9	25.7	19.1935						13.1387
4Auto(S8)	20	27	23					25.2	37.3	29.5075						19.9584
6Auto(S8)	16	22	18					19.2813	29.852	22.9361						15.522
6Auto(S8)	19	28	22					22.8	39.1	28.0649						18.74
8Auto(AM-S7)	16	23	18					19.1	30	22.8332						15.7409
8Auto(AM-S7)	16	22	18					19.2	28.9	22.6159						15.8793
6Auto(AM-S7)	18	28	21					22.4	35.8	26.9372						18.117
6Manual(M6)	17	26	20					18.9	33.4	23.4887						17.0438
6Auto(AM-S7)	18	28	21					22.4	35.8	26.9372						18.117
6Manual(M6)	17	26	20					18.9	33.4	23.4887						17.0438
6Auto(AM-S7)	18	26	21					22.1	34.7	26.4165						17.6699
8Auto(AM-S7)	17	27	20					20.7539	35.335	25.4866						16.761
8Auto(AM-S7)	17	27	20					20.7539	35.335	25.4866						16.761
4Auto(AM-S6)	22	31	26					28.4068	42.2579	33.3217						22.407
4Auto(AM-S6)	22	31	26					28.4068	42.2579	33.3217						22.407
5Manual(M6)	18	25	20					21.2	34.2	25.5746						17.751
12Auto(S6)	11	19	14					13.7	24.6	17.112						11.2476
8Auto(S8)	15	24	18					19	33.5	23.5959						15.0109
12Auto(S6)	12	19	14					13.9	24.7	17.3049						11.5043
8Auto(S8)	14	24	17					17.4	30.8	21.6358						14.0639
12Auto(S6)	11	19	14					13.7	24.6	17.112						11.2476
12Auto(S6)	12	19	14					13.9	24.7	17.3049						11.5043
10Auto(AM-S6)	13	20	16					16.1	25.4	19.276						13.4655
10Manual(M6)	12	20	15					14	24	17.2308						12.0883
10Auto(AM-S6)	13	20	16					16	25.4	19.276						13.3954
10Manual(M6)	12	20	14					13	22.6	16.0722						11.5388
4Auto(AM-S6)	22	30	25					26.5	42.0656	31.7942						22.0202
4Manual(M6)	28	41	32					35.9976	57.8604	43.3724						27.7387
5Auto(S6)	22	29	25					27.3831	39.0128	31.6255						22.2863
5Manual(M5)	22	31	25					26.4199	42.8586	31.9312						21.7202
4Auto(AM-S6)	21	29	24					26.8	40.2092	31.532						21.1383
4Manual(M6)	28	41	32					35.9976	57.8604	43.3724						27.7387
5Auto(S6)	21	27	23					26.0395	37.7702	30.2701						21.2302
4Auto(AM-S6)	22	31	25					26.977	42.4936	32.2814						21.8706
4Manual(M6)	21	32	25					25.7923	44.3415	31.7736						20.9361

6 Auto(S6)	17	27	21	21.2	35.1	25.7972	17.4935
6 Auto(S6)	17	25	20	20.5	33.5	24.8373	16.9415
4 Auto(AM-S6)	22	30	25	27.5	41.5	32.4219	21.7634
4 Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856	29.8946
4 Manual(M6)	30	42	34	38.747	59.8138	46.0447	29.6183
5 Auto(S6)	24	31	26	28.0549	42.473	33.1132	23.6446
5 Manual(M5)	23	33	26	26.3044	44.5088	32.2378	22.7343
4 Manual(M6)	19	27	22	23.9	37.1	28.456	19.278
4 Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229	24.2237
4 Manual(M6)	21	31	25	26.0527	41.2042	31.2185	21.2839
4 Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517	23.7854
4 Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856	29.8946
4 Manual(M6)	22	33	26	26.5556	44.9945	32.56	21.8931
4 Manual(M6)	30	42	34	38.747	59.8138	46.0447	29.6183
5 Auto(S6)	24	31	26	28.0549	42.473	33.1132	23.6446
5 Manual(M5)	23	33	26	26.3044	44.5088	32.2378	22.7343
4 Auto(AM-S6)	29	39	33	37.6	56.2	44.1798	28.8556
4 Manual(M6)	30	42	34	38.747	59.8138	46.0447	29.6183
5 Auto(S6)	24	31	26	28.0549	42.473	33.1132	23.6446
5 Manual(M5)	23	33	26	26.3044	44.5088	32.2378	22.7343
4 Auto(AM-S6)	30	40	34	37.9	56.8	44.5744	30.4633
4 Manual(M6)	31	43	35	38.2	62.8	46.3746	30.8024
5 Auto(S6)	22	31	25	27.0219	40.7879	31.8608	22.1078
5 Manual(M5)	22	32	26	26.1361	42.9279	31.7195	21.8993
6 Auto(AM-S6)	20	28	23	23.9	37.3	28.5088	19.7174
4 Auto(S6)	21	26	23	26.0779	36.3534	29.8782	20.6233
4 Manual(M6)	18	26	21	21.7	35.8	26.3745	18.1488
4 Auto(S6)	20	26	23	25.7924	36.0745	29.5873	20.402
6 Auto(S8)	20	29	23	24.1	22.4	23.3041	19.649
6 Auto(S8)	17	23	19	21.3	31.6	24.9612	17.0411
6 Auto(S8)	20	24	21	25.1	33.1	28.1631	19.8843

Unrd Adj FE - Con	Comb Unrd Adj FE - Con	Guzzler?	Air Aspir Method
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27.7919	23.8286	TC
41.5209	34.2046	TC
29.9953	24.1394	TC
28.1035	23.6187	TC
30.6684	26.3554	TC
29.8271	23.7508G	TC
32.0861	25.8049	TC
30.6684	26.3554	TC
29.8271	23.7508G	TC
29.8271	23.7508G	TC
32.0861	25.8049	TC
32.5529	27.5721	TC
29.8271	23.7508G	TC
27.2332	21.5408	SC
27.5484	21.1758	SC
e)(4) reasons.] Please revise release date to the effective date when vehicles were relabelled;		
e)(4) reasons.] Please revise release date to the effective date when vehicles were relabelled;		
20.6025	15.6978G	NA
26.6824	22.5112	TC
21.5458	17.7559	SC
27.62	21.9099	TC
23.3075	18.4339	NA
22.1836	18.2078	NA
27.558	21.419	SC
26.023	20.1767	SC
27.558	21.419	SC
26.023	20.1767	SC
25.953	20.6333	SC
26.9697	20.2022	TC
26.9697	20.2022	TC
31.1674	25.6515	TC
31.1674	25.6515	TC
25.2021	20.4751	TC
18.7327	13.7134G	TC
24.4645	18.1706	TC
18.877	13.9574G	TC
23.9773	17.2766G	TC
18.7327	13.7134G	TC
18.877	13.9574G	TC
19.7573	15.718G	NA
19.9831	14.7021G	NA
19.7741	15.6701G	NA
19.5451	14.1465G	NA
29.5574	24.8746	TC
40.5954	32.349	TC
28.5683	24.7338	NA
30.6767	25.0054	NA
28.6751	23.9738	TC
40.5954	32.349	TC
26.9749	23.4804	NA
31.0367	25.2227	TC
31.656	24.7	TC

26.5716	20.6716	NA
25.219	19.8774	NA
30.1121	24.8658	TC
41.5209	34.2046	TC
41.8508	34.104	TC
31.0458	26.486	NA
32.7402	26.3594	NA
26.8882	22.0917	TC
32.5108	27.3624	TC
30.8324	24.7304	TC
31.6043	26.7652	TC
41.5209	34.2046	TC
32.6043	25.6912	TC
41.8508	34.104	TC
31.0458	26.486	NA
32.7402	26.3594	NA
39.4682	32.8278	TC
41.8508	34.104	TC
31.0458	26.486	NA
32.7402	26.3594	NA
40.2057	34.1916	TC
42.6219	35.1943	TC
30.6611	25.2814	NA
32.1378	25.5642	NA
27.8048	22.6868	NA
26.0617	22.7606	TC
26.2617	21.0791	TC
25.8545	22.5412	TC
28.9961	22.9829	TC
22.7325	19.2048	NA
23.7762	21.4655	SC

**Air Aspiration Method Desc Trans Trans Desc**

Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	SCV	Selectable Continuously Variable (e.g. CVT with paddles)
Turbocharged	SA	Semi-Automatic
Turbocharged	M	Manual
Turbocharged	SCV	Selectable Continuously Variable (e.g. CVT with paddles)
Turbocharged	SA	Semi-Automatic
Turbocharged	SA	Semi-Automatic
Turbocharged	M	Manual
Turbocharged	SCV	Selectable Continuously Variable (e.g. CVT with paddles)
Turbocharged	SA	Semi-Automatic
Supercharged	SA	Semi-Automatic
Supercharged	SA	Semi-Automatic
Supercharged	SA	Semi-Automatic
Supercharged	SA	Semi-Automatic
Naturally Aspirated	SA	Semi-Automatic
Turbocharged	SA	Semi-Automatic
Supercharged	SA	Semi-Automatic
Turbocharged	SA	Semi-Automatic
Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Supercharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Supercharged	M	Manual
Supercharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Supercharged	M	Manual
Supercharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual
Turbocharged	SA	Semi-Automatic
Turbocharged	SA	Semi-Automatic
Turbocharged	SA	Semi-Automatic
Turbocharged	SA	Semi-Automatic
Turbocharged	SA	Semi-Automatic
Turbocharged	SA	Semi-Automatic
Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Naturally Aspirated	M	Manual
Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Naturally Aspirated	M	Manual
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual
Naturally Aspirated	SA	Semi-Automatic
Naturally Aspirated	M	Manual
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual
Naturally Aspirated	SA	Semi-Automatic
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual



Naturally Aspirated	SA	Semi-Automatic
Naturally Aspirated	SA	Semi-Automatic
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual
Naturally Aspirated	SA	Semi-Automatic
Naturally Aspirated	M	Manual
Turbocharged	M	Manual
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual
Turbocharged	M	Manual
Naturally Aspirated	SA	Semi-Automatic
Naturally Aspirated	M	Manual
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual
Naturally Aspirated	SA	Semi-Automatic
Naturally Aspirated	M	Manual
Turbocharged	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	M	Manual
Naturally Aspirated	SA	Semi-Automatic
Naturally Aspirated	M	Manual
Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)
Turbocharged	SA	Semi-Automatic
Turbocharged	M	Manual
Turbocharged	SA	Semi-Automatic
Turbocharged	SA	Semi-Automatic
Naturally Aspirated	SA	Semi-Automatic
Supercharged	SA	Semi-Automatic

## Trans, Other

# Gears	Trans Lockup	Trans Creeper Gear	Drive Sys
6Y	N		F
6Y	N		F
6N	N		F
6Y	N		A
8N	N		F
8Y	N		A
6N	N		A
8N	N		F
8Y	N		A
8Y	N		A
6N	N		A
8N	N		F
8Y	N		A
8Y	N		A
8Y	N		A
8Y	N		A
8Y	N		A
8Y	N		A
8Y	N		A
8Y	N		A
8Y	N		A
7Y	N		A
7Y	N		A
7Y	N		A
6N	N		A
7Y	N		A
6N	N		A
7Y	N		A
7Y	N		A
7Y	N		A
6Y	N		A
6Y	N		A
6N	N		A
6Y	N		A
8Y	N		A
6Y	N		A
8Y	N		A
6Y	N		A
6Y	N		A
6Y	N		A
6Y	N		A
6N	N		A
6Y	N		A
6N	N		A
6Y	N		F
6N	N		F
6Y	N		F
5N	N		F
6Y	N		F
6N	N		F
6Y	N		F
6Y	N		F
6N	N		F

6Y	N	F
6Y	N	A
6Y	N	F
6Y	N	F
6N	N	F
6Y	N	F
5N	N	F
6N	N	A
6Y	N	F
6N	N	F
6Y	N	F
6Y	N	F
6N	N	F
6N	N	F
6Y	N	F
5N	N	F
6Y	N	F
6N	N	F
6Y	N	F
5N	N	F
6Y	N	F
6Y	N	F
6N	N	F
6Y	N	A
8Y	N	A
8Y	N	A
8Y	N	A

Drive Desc	Primary Basic Engine/Testgroup	Max Ethanol %	Max Biodiesel %
2-Wheel Drive, Front	DADXV02.03PA	10	
2-Wheel Drive, Front	DVWXV02.0U5N		5
2-Wheel Drive, Front	DADXV02.03PA	10	
All Wheel Drive	DADXV02.03UA	10	
2-Wheel Drive, Front	DADXV02.03UB	10	
All Wheel Drive	DADXV02.03UB	10	
All Wheel Drive	DADXV02.03UB	10	
2-Wheel Drive, Front	DADXV02.03UB	10	
All Wheel Drive	DADXV02.03UB	10	
All Wheel Drive	DADXV02.03UB	10	
All Wheel Drive	DADXV02.03UB	10	
2-Wheel Drive, Front	DADXV02.03UB	10	
All Wheel Drive	DADXV02.03UB	10	
All Wheel Drive	DADXJ03.03UF	10	
All Wheel Drive	DADXJ03.03UF	10	
All Wheel Drive	DADXJ03.03UF	10	
All Wheel Drive	DADXJ03.03UF	10	
All Wheel Drive	DVWXV06.3UA8	10	
All Wheel Drive	DADXV02.03UB	10	
All Wheel Drive	DADXT03.0TLF	10	
All Wheel Drive	DADXT03.03UG		5
All Wheel Drive	DADXV04.23UL	10	
All Wheel Drive	DADXV04.23UL	10	
All Wheel Drive	DADXJ03.03UF	10	
All Wheel Drive	DADXJ03.03UF	10	
All Wheel Drive	DADXJ03.03UF	10	
All Wheel Drive	DADXJ03.03UF	10	
All Wheel Drive	DADXJ03.03UF	10	
All Wheel Drive	DADXV04.03UJ	10	
All Wheel Drive	DADXV04.03UJ	10	
All Wheel Drive	DADXV02.03UA	10	
All Wheel Drive	DADXV02.03UA	10	
All Wheel Drive	DADXV02.53UK	10	
All Wheel Drive	DBEXV06.0501	85	
All Wheel Drive	DADXV04.03UJ	10	
All Wheel Drive	DBEXV06.0501	85	
All Wheel Drive	DADXV04.03UJ	10	
All Wheel Drive	DBEXV06.0501	85	
All Wheel Drive	DBEXV06.0501	85	
All Wheel Drive	DADXV05.2LR8	10	
All Wheel Drive	DADXV05.2LR8	10	
All Wheel Drive	DADXV05.2LR8	10	
All Wheel Drive	DADXV05.2LR8	10	
2-Wheel Drive, Front	DVWXJ02.03UA	10	
2-Wheel Drive, Front	DVWXV02.0U5N		5
2-Wheel Drive, Front	DVWXV02.5U3A	10	
2-Wheel Drive, Front	DVWXV02.5U3M	10	
2-Wheel Drive, Front	DVWXJ02.03UA	10	
2-Wheel Drive, Front	DVWXV02.0U5N		5
2-Wheel Drive, Front	DVWXV02.5U3A	10	
2-Wheel Drive, Front	DVWXJ02.03UA	10	
2-Wheel Drive, Front	DVWXJ02.03UA	10	

2-Wheel Drive, Front	DVWXV03.6U46	10	
All Wheel Drive	DVWXV03.6U46	10	
2-Wheel Drive, Front	DVWXV02.03SA	10	
2-Wheel Drive, Front	DVWXV02.0U5N		5
2-Wheel Drive, Front	DVWXV02.0U5N		5
2-Wheel Drive, Front	DVWXV02.5U3A	10	
2-Wheel Drive, Front	DVWXV02.5U3M	10	
All Wheel Drive	DAD XV02.03UA	10	
2-Wheel Drive, Front	DAD XV02.03UA	10	
2-Wheel Drive, Front	DAD XV02.03UA	10	
2-Wheel Drive, Front	DVWXJ02.03UA	10	
2-Wheel Drive, Front	DVWXV02.0U5N		5
2-Wheel Drive, Front	DVWXJ02.03UA	10	
2-Wheel Drive, Front	DVWXV02.0U5N		5
2-Wheel Drive, Front	DVWXV02.5U3A	10	
2-Wheel Drive, Front	DVWXV02.5U3M	10	
2-Wheel Drive, Front	DVWXV02.0U5N		5
2-Wheel Drive, Front	DVWXV02.0U5N		5
2-Wheel Drive, Front	DVWXV02.5U3A	10	
2-Wheel Drive, Front	DVWXV02.5U3M	10	
2-Wheel Drive, Front	DVWXV02.0U4S		5
2-Wheel Drive, Front	DVWXV02.0U4S		5
2-Wheel Drive, Front	DVWXV02.5U3A	10	
2-Wheel Drive, Front	DVWXV02.5U3M	10	
2-Wheel Drive, Front	DVWXV03.6U41	10	
2-Wheel Drive, Front	DVWXJ02.03UA	10	
2-Wheel Drive, Front	DVWXJ02.03UA	10	
All Wheel Drive	DVWXJ02.03UA	10	
All Wheel Drive	DADXT03.02UG		5
All Wheel Drive	DVWXT03.6U76	10	
All Wheel Drive	DVWXT03.0HEV	10	

[illegible]

GP	Gasoline (Premium Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
DU	Diesel, ultra low sulfur (15 ppm, maximum)	MPG
DU	Diesel, ultra low sulfur (15 ppm, maximum)	MPG
G	Gasoline (Regular Unleaded Recommended)	MPG
G	Gasoline (Regular Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
DU	Diesel, ultra low sulfur (15 ppm, maximum)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
DU	Diesel, ultra low sulfur (15 ppm, maximum)	MPG
G	Gasoline (Regular Unleaded Recommended)	MPG
G	Gasoline (Regular Unleaded Recommended)	MPG
DU	Diesel, ultra low sulfur (15 ppm, maximum)	MPG
DU	Diesel, ultra low sulfur (15 ppm, maximum)	MPG
G	Gasoline (Regular Unleaded Recommended)	MPG
G	Gasoline (Regular Unleaded Recommended)	MPG
DU	Diesel, ultra low sulfur (15 ppm, maximum)	MPG
DU	Diesel, ultra low sulfur (15 ppm, maximum)	MPG
G	Gasoline (Regular Unleaded Recommended)	MPG
G	Gasoline (Regular Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
DU	Diesel, ultra low sulfur (15 ppm, maximum)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG
GP	Gasoline (Premium Unleaded Recommended)	MPG

[illegible]



miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	N	Not exempt
miles per gallon	T	Truck
miles per gallon	T	Truck
miles per gallon	T	Truck
miles per gallon	T	Truck
miles per gallon	T	Truck
miles per gallon	T	Truck

definition)	2Dr Pass Vol	2Dr Lugg Vol	4Dr Pass Vol	4Dr Lugg Vol	Htchbk Pass Vol	Htchbk Lugg Vol
	89	20				
	89	20				
	89	20				
			89	20		
			91	12		
			91	12		
			91	12		
	81	10				
	81	10				
	84	12				
	84	12				
			98	16		
			98	16		
			98	16		
					94	25
			100	15		
			107	15		
			107	15		
			90	28		
	84	13				
	81	10				
			90	13		
			90	13		
	84	13				
	84	13				
	81	10				
			98	16		
					94	25
	74	13				
					74	13
	102	13				
	89	11				
	89	11				
	86	7				
	86	7				
	86	7				
					85	12
					85	12
					85	12
					85	12
	81	7				
	81	7				
	81	7				
	94	13				
	94	13				

94	13
94	13
77	11

94	15
94	15
94	15
94	15
94	15
94	15
94	15

94	16
94	16
94	16
94	16
94	16
94	16
92	33
92	33
92	33
92	33
102	16
102	16
102	16
102	16
102	16

Annual Fuel Cost	EPA Calculated Annual Fuel Cost	Comment - Model Type Desc	City2 FE (Guide)	Hwy2 Fuel FE (City2)
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide		
1700	1700			
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide		
2400	2400	reprocessed to pick up change to A3 quattro carline correction		
2200	2200	corrected forward speed to 8 on this CVT transmission		
2400	2400	added A6 quattro configuration data to the base level		
2200	2200			
2200	2200	corrected forward speeds to 8		
2400	2400	added A6 quattro configuration data to the base level		
2400	2400	added A6 quattro configuration data to the base level		
2200	2200			
2050	2050	corrected forward speeds to 8, for this CVT trans		
2400	2400			
2600	2600			
2700	2700			
2700	2700	added new A7 quattro data to the base level		
2700	2700	added new A7 quattro data to the base level		
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32		
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG		
3150	3150			
2600	2600			
3150	3150			
3150	3150			
2700	2700			
2850	2850			
2700	2700			
2850	2850			
2700	2700			
2850	2850			
2850	2850			
2200	2200			
2200	2200			
2850	2850			
4050	4050		8	13
3150	3150			
4050	4050		8	14
3350	3350			
4050	4050		8	13
4050	4050		8	14
3550	3550			
3800	3800			
3550	3550			
4050	4050			
2300	2300	CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE		
1800	1800			
2150	2150			
2150	2150	corrected annual fuel cost		
2400	2400	annual fuel cost corrected, post release 10 and AMS used, corrected highway		
1800	1800			
2300	2300	corrected annual fuel cost		
2300	2300	adjusted annual fuel cost per CD-11-17.....correct the highway value from 42		
2300	2300	EPA has assigned new test numbers		

2700	2700
2850	2850
2300	2300
1700	1700
1700	1700
2050	2050
2050	2050
2600	2600
2100	2100
2300	2300
2100	2100
1700	1700
2200	2200
1700	1700
2050	2050
2050	2050
1750	1750
1700	1700
2050	2050
2050	2050
1700	1700
1650	1650
2150	2150
2050	2050CORRECTED 5 YEAR FUEL SAVINGS
2500	2500
2500	2500
2700	2700
2500	2500CORRECTED ANNUAL FUEL COST
2500	2500
3000	3000
2700	2700

City2 Fuel FE	Low'd City2 MP	Low'd Hwy2 MP	Low'd Comb2 MP	City2 Unadj FE	Hwy2 Unadj FE
---------------	----------------	---------------	----------------	----------------	---------------

10				9.5	17.3
10				10.3	17.2
10				9.5	17.3
10				10.3	17.2

USED

y value from 28 to 29 MPG

.1 to 42.0 MPG and corresponding 5-cycle values



Alt. Alternative Fuel	Unbr2 Unrd Adj	City2 Unrd Adj	Hwy2 Unrd Adj	Cmb2 Unrd Adj	Range2 - Alt Fu	Fuel2 Usage - A
-----------------------	----------------	----------------	---------------	---------------	-----------------	-----------------

11.9181	7.8665	13.2535	9.6274	238	E
12.569	8.3016	13.5384	10.0512	238	E
11.9181	7.8665	13.2535	9.6274	238	E
12.569	8.3016	13.5384	10.0512	238	E





[illegible]

SIDI;  
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SIDI;  
SIDI;

SIDI;  
SIDI;

Intake Valves Per Cyl	Exhaust Valves Per Cyl	Carline Class	Carline Class Desc
2	27	Small Station Wagons	
2	27	Small Station Wagons	
2	27	Small Station Wagons	
2	27	Small Station Wagons	
2	24	Compact Cars	
2	24	Compact Cars	
2	24	Compact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	25	Midsize Cars	
2	25	Midsize Cars	
2	25	Midsize Cars	
2	25	Midsize Cars	
he manufacturer revised the fuel economy label values on 6/22/2012. Previous values were XX MPG city, XX MPG h	25	Midsize Cars	
he manufacturer revised the fuel economy label values on 6/22/2012. Previous values were XX MPG city, XX MPG h	26	Large Cars	
2	26	Large Cars	
2	27	Small Station Wagons	
2	233	Standard SUV 4WD	
2	233	Standard SUV 4WD	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	24	Compact Cars	
2	24	Compact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	25	Midsize Cars	
2	25	Midsize Cars	
2	23	Subcompact Cars	
2	21	Two Seaters	
2	23	Subcompact Cars	
2	25	Midsize Cars	
2	24	Compact Cars	
2	24	Compact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	21	Two Seaters	
2	21	Two Seaters	
2	21	Two Seaters	
2	21	Two Seaters	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	23	Subcompact Cars	
2	24	Compact Cars	
2	24	Compact Cars	

2	24	Compact Cars
2	24	Compact Cars
2	23	Subcompact Cars
2	24	Compact Cars
2	24	Compact Cars
2	24	Compact Cars
2	24	Compact Cars
2	24	Compact Cars
2	24	Compact Cars
2	24	Compact Cars
2	25	Midsize Cars
2	25	Midsize Cars
2	25	Midsize Cars
2	25	Midsize Cars
2	25	Midsize Cars
2	25	Midsize Cars
2	27	Small Station Wagons
2	27	Small Station Wagons
2	27	Small Station Wagons
2	27	Small Station Wagons
2	25	Midsize Cars
2	25	Midsize Cars
2	25	Midsize Cars
2	25	Midsize Cars
2	25	Midsize Cars
2	222	Special Purpose Vehicle, SUV 2WD
2	222	Special Purpose Vehicle, SUV 2WD
2	223	Special Purpose Vehicle, SUV 4WD
2	223	Special Purpose Vehicle, SUV 4WD
2	223	Special Purpose Vehicle, SUV 4WD
2	223	Special Purpose Vehicle, SUV 4WD

Car/Truck Category - Cash for Clunkers	Calc Approach Desc	Sales	Release Date
car	Vehicle Specific 5-cycle label		6/11/2012
car	Derived 5-cycle label		6/22/2012
car	Vehicle Specific 5-cycle label		6/11/2012
car	Vehicle Specific 5-cycle label		6/11/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		6/18/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Derived 5-cycle label		6/25/2012
car	Vehicle Specific 5-cycle label		6/22/2012
car	Vehicle Specific 5-cycle label		6/22/2012
car	Vehicle Specific 5-cycle label		6/22/2012
car	Vehicle Specific 5-cycle label		8/6/2012
car	Derived 5-cycle label		4/26/2012
	Derived 5-cycle label		6/11/2012
	Vehicle Specific 5-cycle label		7/16/2012
car	Vehicle Specific 5-cycle label		6/8/2012
car	Vehicle Specific 5-cycle label		12/3/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		5/21/2012
car	Vehicle Specific 5-cycle label		7/30/2012
car	Vehicle Specific 5-cycle label		7/30/2012
car	Vehicle Specific 5-cycle label		6/18/2012
car	Vehicle Specific 5-cycle label		6/18/2012
car	Vehicle Specific 5-cycle label		6/18/2012
car	Vehicle Specific 5-cycle label		3/30/2012
car	Vehicle Specific 5-cycle label		4/9/2012
car	Vehicle Specific 5-cycle label		3/30/2012
car	Vehicle Specific 5-cycle label		4/9/2012
car	Vehicle Specific 5-cycle label		3/30/2012
car	Vehicle Specific 5-cycle label		3/30/2012
car	Vehicle Specific 5-cycle label		6/11/2012
car	Vehicle Specific 5-cycle label		6/22/2012
car	Vehicle Specific 5-cycle label		6/22/2012
car	Vehicle Specific 5-cycle label		7/30/2012
car	Derived 5-cycle label		6/25/2012
car	Vehicle Specific 5-cycle label		7/30/2012
car	Vehicle Specific 5-cycle label		7/30/2012
car	Derived 5-cycle label		7/30/2012
car	Derived 5-cycle label		6/25/2012
car	Vehicle Specific 5-cycle label		7/30/2012
car	Vehicle Specific 5-cycle label		1/16/2012
car	Vehicle Specific 5-cycle label		1/25/2012

car	Vehicle Specific 5-cycle label	1/16/2012
car	Vehicle Specific 5-cycle label	1/16/2012
car	Vehicle Specific 5-cycle label	6/11/2012
car	Derived 5-cycle label	6/22/2012
car	Derived 5-cycle label	6/25/2012
car	Vehicle Specific 5-cycle label	7/30/2012
car	Vehicle Specific 5-cycle label	7/30/2012
car	Vehicle Specific 5-cycle label	6/11/2012
car	Vehicle Specific 5-cycle label	6/6/2012
car	Vehicle Specific 5-cycle label	7/30/2012
car	Vehicle Specific 5-cycle label	6/8/2012
car	Derived 5-cycle label	6/22/2012
car	Vehicle Specific 5-cycle label	6/6/2012
car	Derived 5-cycle label	6/25/2012
car	Vehicle Specific 5-cycle label	7/30/2012
car	Vehicle Specific 5-cycle label	7/30/2012
car	Derived 5-cycle label	6/25/2012
car	Derived 5-cycle label	6/25/2012
car	Vehicle Specific 5-cycle label	7/30/2012
car	Vehicle Specific 5-cycle label	7/30/2012
car	Vehicle Specific 5-cycle label	6/11/2012
car	Vehicle Specific 5-cycle label	6/18/2012
car	Vehicle Specific 5-cycle label	6/23/2012
car	Vehicle Specific 5-cycle label	6/23/2012
car	Vehicle Specific 5-cycle label	6/11/2012
1	Derived 5-cycle label	6/18/2012
1	Vehicle Specific 5-cycle label	6/11/2012
1	Derived 5-cycle label	6/11/2012
1	Vehicle Specific 5-cycle label	6/18/2012
1	Derived 5-cycle label	6/25/2012
1	Derived 5-cycle label	6/25/2012

EPA FE Label Dataset ID	Unique Label?	Label Recalc?	Relabel
10148	N	N	
10302	N	N	
10147	N	N	
10331	N	N	
10326	N	N	
10209	N	N	
9974	N	N	
10327	N	N	
10211	N	N	
10210	N	N	
9976	N	N	
10328	N	N	
10323	N	N	
10288	N	N	
10274	N	N	
10272	N	Y	RH
10273	N	Y	RH
10195	N	N	
10276	N	N	
10150	N	N	
10203	N	N	
10077	N	N	
10078	N	N	
9982	N	N	
9985	N	N	
9983	N	N	
9986	N	N	
9984	N	N	
10075	N	N	
10074	N	N	
10166	N	N	
10167	N	N	
10200	N	N	
10181	N	N	
10208	N	N	
10185	N	N	
10207	N	N	
10183	N	N	
10184	N	N	
10235	N	N	
10237	N	N	
10236	N	N	
10238	N	N	
10187	N	N	
10332	N	N	
9628	N	N	
9666	N	N	
10277	N	N	
10333	N	N	
9638	N	N	
10186	N	N	
9110	N	N	



9035		N	N
9036		N	N
10160		N	N
10301		N	N
10305		N	N
9627		N	N
9649		N	N
10176		N	N
10174		N	N
9770		N	N
10087		N	N
10300		N	N
10073		N	N
10304		N	N
9626		N	N
9648		N	N
10298		N	N
10303		N	N
9625		N	N
9647		N	N
10158		N	N
10163		N	N
10322		N	N
10321		N	N
10159		N	N
10196		N	N
10091		N	N
10086		N	N
10214		N	N
10319		N	N
10257		N	N

2017-FFP 003901

ENGINE CODE CDMA ONLY.  
ENGINE CODE CDMA ONLY.  
ENGINE CODE CDMA ONLY.

## V6 CYLINDER 2 BANK SYSTEMN

Cyl Deact Desc	Var Valve Timing?	Var Valve Timing Desc	Var Valve Lift?
	Y	CONTINUOUS VARIABLE VALVE TN	
	N		N
	Y	CONTINUOUS VARIABLE VALVE TN	
	Y	CONTINUOUS VARIABLE VALVE TN	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	Intake and Exhaust cam timing is eleN	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TN	
	N		N
	Y	Continuously intake and exhaust carN	
	Y	Continuously intake and exhaust carN	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TY	
Deactivation of 1 but 1 common charge can interfere with intake and exhaust cam timing	Y	CONTINUOUS VARIABLE VALVE TY	
Deactivation of 1 but 1 common charge can interfere with intake and exhaust cam timing	Y	CONTINUOUS VARIABLE VALVE TY	
	Y	CONTINUOUS VARIABLE VALVE TN	
	Y	CONTINUOUS VARIABLE VALVE TN	
	Y	CONTINUOUSLY INTAKE AND EXIN	
	Y	INLET AND OUTLET CONTINUOUEN	
Deactivation of 1 but 1 common charge can interfere with intake and exhaust cam timing	Y	CONTINUOUSLY INTAKE AND EXIN	
	Y	INLET AND OUTLET CONTINUOUEN	
Deactivation of 1 but 1 common charge can interfere with intake and exhaust cam timing	Y	CONTINUOUSLY INTAKE AND EXIN	
	Y	INLET AND OUTLET CONTINUOUEN	
	Y	INLET AND OUTLET CONTINUOUEN	
PYDER)	Y	INLET AND OUTLET CONTINUOUEN	
PYDER)	Y	INLET AND OUTLET CONTINUOUEN	
PYDER)	Y	INLET AND OUTLET CONTINUOUEN	
PYDER)	Y	INLET AND OUTLET CONTINUOUEN	
	Y	position of intake/exhaust camshaft cN	
	N		N
	Y	INLET CONTIONOUSLY VARIABLEN	
	Y	INLET CONTIONOUSLY VARIABLEN	
	Y	position of intake/exhaust camshaft cN	
	N		N
	Y	INLET CONTIONOUSLY VARIABLEN	
	Y	position of intake/exhaust camshaft cN	
	Y	position of intake/exhaust camshaft cN	

Y	position of intake/exhaust camshaft	N
Y	position of intake/exhaust camshaft	N
Y	CONTINUOUS VARIABLE VALVE	TN
N		N
N		N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	CONTINUOUS VARIABLE VALVE	TN
Y	CONTINUOUS VARIABLE VALVE	TN
Y	CONTINUOUS VARIABLE VALVE	TN
Y	position of intake/exhaust camshaft	€N
N		N
Y	position of intake/exhaust camshaft	€N
N		N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
N		N
N		N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
N		N
N		N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	INLET CONTIONOUSLY VARIABLE	N
Y	Electronic control / Hydraulic adjust	nN
Y	position of intake/exhaust camshaft	€N
Y	position of intake/exhaust camshaft	€N
Y	position of intake/exhaust camshaft	€N
N		N
Y	INTAKE / EXHAUST CAM TIMING	ACN
Y	MECHANICAL HYDRAULIC VVT	SYN

Energy Storage Device Desc	Energy Storage Device,If Other	# Batteries
----------------------------	--------------------------------	-------------

AUDI VALVE LIFT SYSTEM  
AUDI VALVE LIFT SYSTEM  
AUDI VALVE LIFT SYSTEM  
AUDI VALVE LIFT SYSTEM  
AUDI VALVE LIFT SYSTEM

AULIC  
 malleoforbicoid, internal, elongate, triangular, default (2) are lobed at the outside of the apical ridge, ECT greater than 40  
 AULIC  
 malleoforbicoid, internal, elongate, triangular, default (2) are lobed at the outside of the apical ridge, ECT greater than 40  
 AULIC  
 AULIC  
 AULIC  
 AULIC  
 AULIC  
 AULIC  
 ly adjusted

ly adjusted  
ly adjusted

ally adjusted  
ally adjusted

ly adjusted

ly adjusted

ly adjusted  
ly adjusted  
ly adjusted

TROLLED ELECTRONICALLY

Battery(s)

1

Battery Type Desc	Battery Type, If Other	Total Voltage fo	Batt Energy Capacity (Batt Specific Energy (
-------------------	------------------------	------------------	--

Qc engine speed 980 des 3500 RPM, vehicle speed greater than 25 kmh			
Qc engine speed 980 des 3500 RPM, vehicle speed greater than 25 kmh			

Qc engine speed 980 des 3500 RPM, vehicle speed greater than 25 kmh			
Qc engine speed 980 des 3500 RPM, vehicle speed greater than 25 kmh			



NIMH

288

6

21.5

Bat	Charger	Type	Desc	Comments	#	Capacitors	Regen	Braking	Type	Desc
-----	---------	------	------	----------	---	------------	-------	---------	------	------

On-Board

Other

**Regen Braking Type, If Other**

BRAKE PEDAL TRIGGERED REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM

Regen Braking Wheels Source Driver Cntrl Regen Braking? Fuel Cell Desc Usable H2 Fill Capacity (

Both

N







Motor Gen Type Desc	Motor Gen Type, If Other	Rated Motor Gen Power (l
---------------------	--------------------------	--------------------------

Other

3 PHASE CURRENT PERM. MAGNET

34

Fuel Metering Type 1 Desc	Fuel Metering Type 2 Desc	Fuel Metering Sys Cd
		GDI
		CRDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		CRDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		GDI
		MFI
		GDI
		MFI
		GDI
		MFI
		MFI
		GDI
		GDI
		GDI
		GDI
		GDI
		CRDI
		MFI
		MFI
		GDI
		CRDI
		MFI
		GDI
		GDI

GDI  
GDI  
GDI  
CRDI  
CRDI  
MFI  
MFI  
GDI  
GDI  
GDI  
GDI  
CRDI  
GDI  
CRDI  
MFI  
MFI  
CRDI  
CRDI  
MFI  
MFI  
CRDI  
CRDI  
MFI  
MFI  
GDI  
GDI  
GDI  
GDI  
CRDI  
GDI  
GDI

**Fuel Metering Sys Desc****Fuel Cell Vehicle Off Board Charge Capable (Y or N)**

Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection	N	
Spark Ignition Direct Injection		
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	N
Multipoint/sequential fuel injection	N	
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection	N	
Spark Ignition Direct Injection		
Multipoint/sequential fuel injection	N	
Multipoint/sequential fuel injection	N	
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection	N	
Multipoint/sequential fuel injection		
Multipoint/sequential fuel injection		
Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection	N	
Multipoint/sequential fuel injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		

Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection	N	
Common Rail Direct Diesel Injection	N	
Multipoint/sequential fuel injection		
Multipoint/sequential fuel injection		
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection	N	
Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection	N	
Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection	N	
Multipoint/sequential fuel injection		
Multipoint/sequential fuel injection		
Common Rail Direct Diesel Injection	N	
Common Rail Direct Diesel Injection	N	
Multipoint/sequential fuel injection		
Multipoint/sequential fuel injection		
Common Rail Direct Diesel Injection		
Common Rail Direct Diesel Injection		
Multipoint/sequential fuel injection		
Multipoint/sequential fuel injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection		
Common Rail Direct Diesel Injection		
Spark Ignition Direct Injection		
Spark Ignition Direct Injection	N	N

Camless Valvetrain (Y or N)	Oil Viscosity	Eng Mgmt System (
N	5W40 VW 50200	N
N	5W40	N
N	5W40 VW 50200	N
N	5W40	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W30 VW 50700	N
N	5W30 VW 50400 / 50700	N
N	5W30 VW 50400 / 50700	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W30 VW 50400 / 50700	N
N	5W30 VW 50400 / 50700	N
N	5W40	N
N	5W40	N
N	5W40 VW 50200	N
N	5W30 VW 504 00	N
N	5W30 VW 50400 / 50700	N
N	5W30 VW 504 00	N
N	5W30 VW 50400 / 50700	N
N	5W30 VW 504 00	N
N	5W30 VW 504 00	N
N	10W60 VW 50101 / 50500	N
N	10W60 VW 50101 / 50500	N
N	10W60 VW 50101 / 50500	N
N	10W60 VW 50101 / 50500	N
N	5W40 VW 50200	N
N	5W40	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	5W40 VW 50200	N
N	5W40	N
N	10W40 / VW50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N



N	5W-40 VW50200	N
N	5W-40 VW50200	N
N	5W40 / VW50200	N
N	5W40	N
N	5W40	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	5W40	N
N	5W40	N
N	5W40	N
N	5W40 VW 50200	N
N	5W40	N
N	5W40 VW 50200	N
N	5W40	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	5W40	N
N	5W40	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	5W40 VW 50501	N
N	5W40 VW 50501	N
N	10W40 / VW50200	N
N	10W40 / VW50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N
N	5W30 VW 50700	N
N	5W40 VW 50200	N
N	5W40 VW 50200	N

**Eng Mgmt System (Stop/Start !Trans in FE Guide (MFR Trans as listed Model Type Desc (MFR entered)**

No	Auto(AM-S6)	paddles)(AMS6)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	A3 frt manual
No	Auto(AM-S6)	paddles)(AMS6)	A3 quattro
No	Auto(AV-S8)	Auto(AV-S8)	
No	Auto(S8)	Auto(S8)	
No	Manual(M6)	Manual(M6)	
No	Auto(AV-S8)	Auto(AV-S8)	
No	Auto(S8)	Auto(S8)	
No	Auto(S8)	Auto(S8)	
No	Manual(M6)	Manual(M6)	
No	Auto(AV-S8)	Auto(AV-S8)	Audi A6 CVT
No	Auto(S8)	Auto(S8)	
No	Auto(S8)	Auto(S8)	Audi A6 quattro
No	Auto(S8)	Auto(S8)	
No	Auto(S8)	Auto(S8)	
No	Auto(S8)	Auto(S8)	
No	Auto(S8)	Auto(S8)	
No	Auto(S8)	Auto(S8)	Audi Q7
No	Auto(S8)	Auto(S8)	
No	Auto(AM-S7)	paddles)(AMS7)	
No	Auto(AM-S7)	paddles)(AMS7)	
No	Auto(AM-S7)	paddles)(AMS7)	
No	Manual(M6)	Manual(M6)	
No	Auto(AM-S7)	paddles)(AMS7)	
No	Manual(M6)	Manual(M6)	
No	Auto(AM-S7)	paddles)(AMS7)	
No	Auto(AM-S7)	paddles)(AMS7)	
No	Auto(AM-S7)	paddles)(AMS7)	
No	Auto(AM-S6)	paddles)(AMS6)	TT Coupe quattro
No	Auto(AM-S6)	paddles)(AMS6)	TT Coupe quattro
No	Manual(M6)	Manual(M6)	TTRS
No	Auto(S6)	Auto(S6)	
No	Auto(S8)	Auto(S8)	
No	Auto(S6)	Auto(S6)	
No	Auto(S8)	Auto(S8)	
No	Auto(S6)	Auto(S6)	
No	Auto(S6)	Auto(S6)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	Gallardo Coupe M6
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	Gallardo Spyder M6
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	
No	Auto(S6)	Auto(S6)	
No	Manual(M5)	Manual(M5)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	
No	Auto(S6)	Auto(S6)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	CC M6

No	Auto(S6)	Auto(S6)	
No	Auto(S6)	Auto(S6)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	Jetta SportWagen M6
No	Auto(S6)	Auto(S6)	
No	Manual(M5)	Manual(M5)	
No	Manual(M6)	Manual(M6)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	
No	Manual(M6)	Manual(M6)	Jetta SportWagen M6
No	Auto(S6)	Auto(S6)	
No	Manual(M5)	Manual(M5)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	Jetta SportWagen M6
No	Auto(S6)	Auto(S6)	
No	Manual(M5)	Manual(M5)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Manual(M6)	Manual(M6)	
No	Auto(S6)	Auto(S6)	
No	Manual(M5)	Manual(M5)	
No	Auto(AM-S6)	paddles)(AMS6)	
No	Auto(S6)	Auto(S6)	Tiguan front
No	Manual(M6)	Manual(M6)	
No	Auto(S6)	Auto(S6)	
No	Auto(S8)	Auto(S8)	
No	Auto(S8)	Auto(S8)	
No	Auto(S8)	Auto(S8)	Touareg Hybrid

Charge Depleting Calc Appr CCharge Depleting Calc Appr DesCharge Sustaining Calc Appr C



Charge Sustaining Calc Appr De	EPA Calculated Annual Fuel Cost	EPA Calculated Gas Guzzler MPG
--------------------------------	---------------------------------	--------------------------------



MFR Calculated Gas Guzzler MPG	EPA Calculated Gas Guzzler Indicator ('Mfr Contact
--------------------------------	--

30.8	
46.2	
30.4	
30.9	
35.2	
4.2	
33.2	
35.2	
4.2	
4.2	
33.2	
36.9	
4.2	
28.1	
27.5	
27.5	
27.5	
19.3	
29.5	
22.9	
28.1	
23	
22.6	
26.9	
23.5	
26.9	
23.5	
26.4	
25.5	
25.5	
33.3	
33.3	
25.6	
17.2	
23.6	
17.4	
21.8	
17.2	
17.4	
19.4	
17.4	
19.3	
16.1	
31.8	
43.4	
31.6	
31.9	
31.5	
43.4	
30.3	
32.3	
31.8	



25.8  
24.8  
32.4  
46.2  
46  
33.1  
32.2  
28.5  
34.8  
31.2  
35  
46.2  
32.6  
46  
33.1  
32.2  
44.2  
46  
33.1  
32.2  
44.6  
46.4  
31.9  
31.7  
28.5  
29.9  
26.4  
29.6  
23.3  
25  
28.2

**Contact Phone Mfr Contact (Rel 8)**[illegible]

[illegible]

**To:** David Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Wed 6/27/2012 1:34:59 PM  
**Subject:** RE: 2013 FE Guide - VW Group data attached

Hi Dave;

I reprocessed four labels indexes: 37, 38, 39 and 70, for the 2.0L Audi models, it was my transposing of the Gas Guzzler MPG and the adjusted combined model type fuel consumption entry fields. Should be no errors now.

The other EPA comments have to do with the relabeling of the A8 and A8L, index 128 and 129, model types due to an addition to the base level with the addition of a model running change and with our letter of June 27, 2012 and revision to the application. The A7 quattro (index # 076) and A6 quattro were added to the test group. The A7 quattro is in the same base level as the A8 and A8L with this engine and transmission combination. This resulted in a slight improvement to the city value only, for the A8 and A8L to 18 MPG from 17 MPG. The release date in Verify is correct at June 22, 2012.

If you have any questions, or suggestion please let me know.

Thanks,

Richard

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Monday, June 25, 2012 5:15 PM  
To: Thomas, Richard (EEO)  
Subject: 2013 FE Guide - VW Group data attached

Richard,

Here's the 2013 data in Verify as of 6/25/2012 10AM or so. I didn't check it over with a fine tooth comb, but the macro came up with a few errors

Dave

(See attached file: VW Group - 2013 FE Guide-rel10-all rel dates-no-sales-6-25-2012.xlsx)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 6/27/2012 1:45:01 PM  
**Subject:** Beetle Test on Hold

Hi Jim,

As we discussed, we will need to reschedule the Beetle test originally set for July 11th. Please cancel this test and we will submit a new ready date in the next day or two, to re-schedule.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Wed 6/27/2012 1:48:06 PM  
**Subject:** RE: 2013 FE Guide - VW Group data attached [Thanks] NNT0

From: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
To: David Good/AA/USEPA/US@EPA  
Date: 06/27/2012 09:35 AM  
Subject: RE: 2013 FE Guide - VW Group data attached

Hi Dave;

I reprocessed four labels indexes: 37, 38, 39 and 70, for the 2.0L Audi models, it was my transposing of the Gas Guzzler MPG and the adjusted combined model type fuel consumption entry fields. Should be no errors now.

The other EPA comments have to do with the relabeling of the A8 and A8L, index 128 and 129, model types due to an addition to the base level with the addition of a model running change and with our letter of June 27, 2012 and revision to the application. The A7 quattro (index # 076) and A6 quattro were added to the test group. The A7 quattro is in the same base level as the A8 and A8L with this engine and transmission combination. This resulted in a slight improvement to the city value only, for the A8 and A8L to 18 MPG from 17 MPG. The release date in Verify is correct at June 22, 2012.

If you have any questions, or suggestion please let me know.

Thanks,  
Richard

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Monday, June 25, 2012 5:15 PM  
To: Thomas, Richard (EEO)  
Subject: 2013 FE Guide - VW Group data attached

Richard,

Here's the 2013 data in Verify as of 6/25/2012 10AM or so. I didn't check it over with a fine tooth comb, but the macro came up with a few errors

Dave

(See attached file: VW Group - 2013 FE Guide-rel10-all rel dates-no-sales-6-25-2012.xlsx)

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 6/27/2012 4:06:33 PM  
**Subject:** Re: Beetle Test on Hold

I spoke to Ben Haynes in the lab and he has put it on hold.

Jim Snyder

Light-Duty Vehicle Group

Compliance Division

United States Environmental Protection Agency

(734) 214-4946

snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 06/27/2012 09:46 AM  
Subject: Beetle Test on Hold

Hi Jim,

As we discussed, we will need to reschedule the Beetle test originally set for July 11th. Please cancel this test and we will submit a new ready date in the next day or two, to re-schedule.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Sat 6/30/2012 5:49:11 PM  
**Subject:** VW Group

Hi Jim,

Today we submitted the application and certificate request for Audi test group DADXT02.04UB.

This is a carryover test group only for the Q5 with 2.0L non- FFV version. When the production change is made to the FFV version, the FFV vehicles will fall in another FFV test group. Note also that we have new EDV exhaust tests for this vehicle.

Let me know if you need anything else to proceed with the certification.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 7/2/2012 6:13:32 PM  
**Subject:** RE: VW Group - Decision Info 1.4L Jetta Hybrid  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
<mailto:Snyder.Jim@epamail.epa.gov>  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Snyder.Jim@epamail.epa.gov>  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hi Jim,

Hope you had a good weekend.

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**Cc:** []  
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Thanks Jim, I appreciated it. Now that you mention it, I was thinking of too ... but it might have to wait a bit.

Ex. 6

Just as a heads up ( I think I mentioned to you on the phone previously), we have received and are now submitting quite a few RC/FF documents. You may already see the first ones we started with the last couple days in the system.

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**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Tue 7/3/2012 4:10:33 PM  
**Subject:** re: 2013 FE Guide Errors in Verify; Many errors when calculating adjusted combined fuel consumption(gal/100 miles); Request to update any 2013 Labels submitted before May 11, 2012  
[VW Group 2013 FE Guide1-all rel dates-no-sales-06-29-2012 PLUS new Rel10 fields.xlsx](#)

Richard,

As we discussed over the phone yesterday---you were one of the few manufacturers who calculated fuel consumption correctly---good Job!

Dave

1. Errors in Verify: Attached is a spreadsheet with the 2013 FE Label errors in Verify as of June 29, 2012. The spreadsheet contains all the 2013 FE Label data in Verify as of June 29, 2012 including some of the new Release 10 fields (columns 141-184). Color coding is explained in the heading for each column, except for the various shades of green. Labels with errors are highlighted in green fill in the first few columns or almost all columns---with the field where the error occurred highlighted in yellow fill. [Normal Green (not pea green) means the error occurred in the Combined Adjusted Fuel Consumption (gal/100 miles) field.]

When you get a chance, please correct the errors--so I can forward the corrected data to DOE for posting on the web on the 1st and 15th of each month.

2. Errors in Combined Adjusted Fuel Consumption: I'm finding a lot of errors in the new field "Adjusted Combined Model Type Fuel Consumption" (column 165 of the attached spreadsheet). EPA calculated fuel consumption is in column 166. Some manufacturers are entering fuel economy values (mpg) values instead of fuel consumption (gallons per 100 miles). Some manufacturers are incorrectly calculating fuel consumption using the (incorrect) unrounded adjusted combined mpg value instead of the correct rounded adjusted combined mpg value (as prominently displayed on 2013 labels (window stickers)---as explained in more detail in Item 3, below.

When you get a chance, please correct the fuel consumption errors in Verify. [Note that I'm not currently sending fuel consumption values to DOE for posting on the web, so I don't need the fuel consumption errors corrected immediately. Please correct them as soon as possible, but if you need 2-3 weeks to correct them, that's OK with me.]

If there are errors in the fuel consumption value listed on the actual labels (window stickers) of your vehicles, please correct the labels as soon as practicable. Call or email me if you have questions about the fuel consumption values shown on the actual labels (window stickers) of your vehicles.

3. Mistake in the EPA Regulations for Calculating Fuel Consumption (600.311-12(c): For conventional vehicles (not EVs or PHEVs), there is a mistake in the current regulations at 600.311-12(c) which EPA proposed to correct in the 2017 greenhouse gas proposal (page 76FR 75392, Dec 1, 2011).

The current (incorrect) regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The unrounded value for combined fuel economy from 600.210-12(c)."

The (correct) proposed regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The value for combined fuel economy from 600.210-12(c) rounded to the nearest whole mpg." Please use the voluntarily lowered combined adjusted MPG value, if applicable.

We are making this change for several reasons, e.g. so that customers will be able to accurately calculate the fuel consumption of their vehicle from the information displayed on the label; so that two vehicles with the same combined fuel economy mpg values won't have different fuel consumption values displayed on the label, etc. One benefit to manufacturers and EPA is that this correction will result in fewer questions from consumers about how the fuel consumption values are calculated.

4. Request to update any 2013 FE Labels submitted to Verify before May 11, 2012: EPA and DOE are in the process of updating the information displayed at [www.fueleconomy.gov](http://www.fueleconomy.gov) to show the same type of information which is displayed on the 2013 window stickers, e.g. Fuel Economy (1-10) rating, Greenhouse Gas (1-10) Rating, Smog (1-10) rating, adjusted combined fuel consumption (values, adjusted combined CO2 (grams/mile) values, amount saved (or spent) over 5 years, battery charging time for EVs & PHEVs, etc. We anticipate that the website will be updated within the next couple of months. For this reason, we are requesting that manufacturers update any labels which were entered into EPA's Verify data base prior to May 11, 2012 (Verify Release 9 labels which don't contain this information).

If possible, please try to update those labels before August 6, 2012. Please call or email me if you need more time to update your labels.

Thanks

EPA comr	VERIFY cc	Model Yr	Mfr Name	Division	ICarline	Verify Mfr Index	Mo Eng Displ # Cyl	
		2013	Audi	Audi	A3	ADX	59	2.0 4
Diesel;		2013	Audi	Audi	A3	ADX	73	2.0 4
		2013	Audi	Audi	A3	ADX	58	2.0 4
		2013	Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013	Audi	Audi	A4	ADX	35	2.0 4
		2013	Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013	Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013	Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013	Audi	Audi	A5 Cabriolet	ADX	39	2.0 4
		2013	Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013	Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013	Audi	Audi	A6	ADX	65	2.0 4
		2013	Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013	Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013	Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled. Please include in 2013		2013	Audi	Audi	A8	ADX	128	3.0 6
Relabeled. Please include in 2013		2013	Audi	Audi	A8L	ADX	129	3.0 6
		2013	Audi	Audi	A8L	ADX	109	6.3 12
		2013	Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013	Audi	Audi	Q7	ADX	61	3.0 6
Diesel;		2013	Audi	Audi	Q7	ADX	53	3.0 6
		2013	Audi	Audi	RS5	ADX	49	4.2 8
Error in City		2013	Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
		2013	Audi	Audi	S4	ADX	42	3.0 6
		2013	Audi	Audi	S4	ADX	45	3.0 6
		2013	Audi	Audi	S5	ADX	43	3.0 6
		2013	Audi	Audi	S5	ADX	46	3.0 6
		2013	Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013	Audi	Audi	S6	ADX	48	4.0 8
		2013	Audi	Audi	S7	ADX	47	4.0 8
		2013	Audi	Audi	TT Coupe	ADX	66	2.0 4
		2013	Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013	Audi	Audi	TTRS Coup	ADX	69	2.5 5
		2013	Bentley	Bentley Motors	Continental	BEX	110	6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	108	4.0 8
		2013	Bentley	Bentley Motors	Continental	BEX	113	6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	107	4.0 8
		2013	Bentley	Bentley Motors	Continental	BEX	111	6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	112	6.0 12
Warning - if trans type is Automatic		2013	Bugatti	Bugatti	Veyron	BGT	88	8.0 16
		2013	Lamborghini	Lamborghini	Gallardo Coupe	NLX	30	5.2 10
		2013	Lamborghini	Lamborghini	Gallardo Coupe	NLX	32	5.2 10
		2013	Lamborghini	Lamborghini	Gallardo Sport	NLX	31	5.2 10
		2013	Lamborghini	Lamborghini	Gallardo Sport	NLX	33	5.2 10

Diesel;	2013 Volkswagen Volkswagen	BEETLE	VWX	19	2.0	4
	2013 Volkswagen Volkswagen	BEETLE	VWX	84	2.0	4
	2013 Volkswagen Volkswagen	BEETLE	VWX	17	2.5	5
	2013 Volkswagen Volkswagen	BEETLE	VWX	27	2.5	5
Diesel;	2013 Volkswagen Volkswagen	BEETLE CO	VWX	20	2.0	4
	2013 Volkswagen Volkswagen	BEETLE CO	VWX	85	2.0	4
	2013 Volkswagen Volkswagen	BEETLE CO	VWX	18	2.5	5
	2013 Volkswagen Volkswagen	CC	VWX	1	2.0	4
Diesel;	2013 Volkswagen Volkswagen	CC	VWX	4	2.0	4
	2013 Volkswagen Volkswagen	CC	VWX	2	3.6	6
	2013 Volkswagen Volkswagen	CC 4MOTI	VWX	3	3.6	6
	2013 Volkswagen Volkswagen	Eos	VWX	21	2.0	4
Diesel;	2013 Volkswagen Volkswagen	GOLF	VWX	72	2.0	4
	2013 Volkswagen Volkswagen	GOLF	VWX	81	2.0	4
	2013 Volkswagen Volkswagen	GOLF	VWX	16	2.5	5
	2013 Volkswagen Volkswagen	GOLF	VWX	26	2.5	5
Diesel;	2013 Volkswagen Volkswagen	Golf R	VWX	57	2.0	4
	2013 Volkswagen Volkswagen	GTI	VWX	22	2.0	4
	2013 Volkswagen Volkswagen	GTI	VWX	23	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	50	2.0	4
Diesel;	2013 Volkswagen Volkswagen	Jetta	VWX	71	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	86	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	87	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	51	2.0	4
Diesel;	2013 Volkswagen Volkswagen	Jetta	VWX	80	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	15	2.5	5
	2013 Volkswagen Volkswagen	Jetta	VWX	25	2.5	5
	2013 Volkswagen Volkswagen	JETTA SPO	VWX	74	2.0	4
Diesel;	2013 Volkswagen Volkswagen	JETTA SPO	VWX	79	2.0	4
	2013 Volkswagen Volkswagen	JETTA SPO	VWX	14	2.5	5
	2013 Volkswagen Volkswagen	JETTA SPO	VWX	24	2.5	5
	2013 Volkswagen Volkswagen	Passat	VWX	62	2.0	4
Diesel;	2013 Volkswagen Volkswagen	Passat	VWX	64	2.0	4
	2013 Volkswagen Volkswagen	Passat	VWX	83	2.5	5
	2013 Volkswagen Volkswagen	Passat	VWX	82	2.5	5
	2013 Volkswagen Volkswagen	Passat	VWX	63	3.6	6
Diesel;	2013 Volkswagen Volkswagen	TIGUAN	VWX	68	2.0	4
	2013 Volkswagen Volkswagen	TIGUAN	VWX	56	2.0	4
	2013 Volkswagen Volkswagen	TIGUAN 4M	VWX	55	2.0	4
	2013 Volkswagen Volkswagen	TOUAREG	VWX	54	3.0	6
Hybrid;	2013 Volkswagen Volkswagen	TOUAREG	VWX	78	3.6	6
	2013 Volkswagen Volkswagen	Touareg H	VWX	75	3.0	6

Trans in FE	City FE (G	Hwy FE (C	Comb FE (L	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Auto(AM-S	30	42	34				39.0935	59.3437	46.1856
Manual(M	21	30	24				25.3	40.3	30.3902
Auto(AM-S	21	28	24				27.2	37.1	30.9119
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S	16	23	18				19.1	30	22.8332
Auto(AM-S	16	22	18				19.2	28.9	22.6159
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				18.9	33.4	23.4887
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				18.9	33.4	23.4887
Auto(AM-S	18	26	21				22.1	34.7	26.4165
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Manual(M	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S7)	8	15	10				10	17.9	12.4782
Auto(AM-S	13	20	16				16.1	25.4	19.276
Manual(M	12	20	15				14	24	17.2308
Auto(AM-S	13	20	16				16	25.4	19.197
Manual(M	12	20	14				13	22.6	16.0722

Auto(S8) 600.314-08 states label values must not change for entire model year, except for 600.507(a) and 600.314-0

Auto(S8) 600.314-08 states label values must not change for entire model year, except for 600.507(a) and 600.314-0

Auto(AM-S	22	30	25	26.5	42.0656	31.7942
Manual(M	28	41	32	35.9976	57.8604	43.3724
Auto(S6)	22	29	25	27.3831	39.0128	31.6255
Manual(M	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
Manual(M	28	41	32	35.9976	57.8604	43.3724
Auto(S6)	21	27	23	26.0395	37.7702	30.2701
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M	21	32	25	25.7923	44.3415	31.7736
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Manual(M	19	27	22	23.9	37.1	28.456
Auto(AM-S	24	33	27	29.9333	43.5096	34.8229
Manual(M	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M	24	34	28	28.8	46.2	34.6771
Manual(M	22	33	26	26.5556	44.9945	32.56
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	29	39	33	37.6	56.2	44.1798
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Model	Year	Class	Comb	Unr	Guzzler?	Air Aspir	IAir Aspir	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286	TC				Turbochar	AMS	Automate			6
29.8946	41.5209	34.2046	TC				Turbochar	AMS	Automate			6
20.8146	29.9953	24.1394	TC				Turbochar	M	Manual			6
20.891	28.1035	23.6187	TC				Turbochar	AMS	Automate			6
23.6355	30.6684	26.3554	TC				Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508	TC				Turbochar	SA	Semi-Auto			8
22.2425	32.0861	25.8049	TC				Turbochar	M	Manual			6
23.6355	30.6684	26.3554	TC				Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508	TC				Turbochar	SA	Semi-Auto			8
20.3576	29.8271	23.7508	TC				Turbochar	SA	Semi-Auto			8
22.2425	32.0861	25.8049	TC				Turbochar	M	Manual			6
24.5044	32.5529	27.5721	TC				Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508	TC				Turbochar	SA	Semi-Auto			8
18.3949	27.2332	21.5408	SC				Superchar	SA	Semi-Auto			8
17.8058	27.5484	21.1758	SC				Superchar	SA	Semi-Auto			8
8(1)(4) reasons; Please revise release date to the effective date when vehicles were relabelled;	27.3458	21.1758	SC				Superchar	SA	Semi-Auto			8
8(1)(4) reasons; Please revise release date to the effective date when vehicles were relabelled;	27.3458	21.1758	SC				Superchar	SA	Semi-Auto			8
13.1387	20.6025	15.6978	G				Naturally	SA	Semi-Auto			8
19.9584	26.6824	22.5112	TC				Turbochar	SA	Semi-Auto			8
15.522	21.5458	17.7559	SC				Superchar	SA	Semi-Auto			8
18.74	27.62	21.9099	TC				Turbochar	SA	Semi-Auto			8
15.7409	23.3075	18.4339	NA				Naturally	AMS	Automate			7
15.8793	22.1836	18.2078	NA				Naturally	AMS	Automate			7
18.117	27.558	21.419	SC				Superchar	AMS	Automate			7
17.0438	26.023	20.1767	SC				Superchar	M	Manual			6
18.117	27.558	21.419	SC				Superchar	AMS	Automate			7
17.0438	26.023	20.1767	SC				Superchar	M	Manual			6
17.6699	25.953	20.6333	SC				Superchar	AMS	Automate			7
16.761	26.9697	20.2022	TC				Turbochar	AMS	Automate			7
16.761	26.9697	20.2022	TC				Turbochar	AMS	Automate			7
22.407	31.1674	25.6515	TC				Turbochar	AMS	Automate			6
22.407	31.1674	25.6515	TC				Turbochar	AMS	Automate			6
17.751	25.2021	20.4751	TC				Turbochar	M	Manual			6
11.2476	18.7327	13.7134	G				Turbochar	SA	Semi-Auto			6
15.0109	24.4645	18.1706	TC				Turbochar	SA	Semi-Auto			8
11.5043	18.877	13.9574	G				Turbochar	SA	Semi-Auto			6
14.0639	23.9773	17.2766	G				Turbochar	SA	Semi-Auto			8
11.2476	18.7327	13.7134	G				Turbochar	SA	Semi-Auto			6
11.5043	18.877	13.9574	G				Turbochar	SA	Semi-Auto			6
8.4232	14.7698	10.4424	G				Turbochar	SA	Semi-Auto			7
13.4655	19.7573	15.718	G				Naturally	AMS	Automate			6
12.0883	19.9831	14.7021	G				Naturally	AM	Manual			6
13.3954	19.7741	15.6701	G				Naturally	AMS	Automate			6
11.5388	19.5451	14.1465	G				Naturally	AM	Manual			6

22.0202	29.5574	24.8746	TC	TurbocharᵀAMS	Automatec	6
27.7387	40.5954	32.349	TC	TurbocharᵀM	Manual	6
22.2863	28.5683	24.7338	NA	Naturally ᵀSA	Semi-Auto	6
21.7202	30.6767	25.0054	NA	Naturally ᵀM	Manual	5
21.1383	28.6751	23.9738	TC	TurbocharᵀAMS	Automatec	6
27.7387	40.5954	32.349	TC	TurbocharᵀM	Manual	6
21.2302	26.9749	23.4804	NA	Naturally ᵀSA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	TurbocharᵀAMS	Automatec	6
20.9361	31.656	24.7	TC	TurbocharᵀM	Manual	6
17.4935	26.5716	20.6716	NA	Naturally ᵀSA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally ᵀSA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	TurbocharᵀAMS	Automatec	6
29.8946	41.5209	34.2046	TC	TurbocharᵀAMS	Automatec	6
29.6183	41.8508	34.104	TC	TurbocharᵀM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ᵀSA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally ᵀM	Manual	5
19.278	26.8882	22.0917	TC	TurbocharᵀM	Manual	6
24.2237	32.5108	27.3624	TC	TurbocharᵀAMS	Automatec	6
21.2839	30.8324	24.7304	TC	TurbocharᵀM	Manual	6
23.7854	31.6043	26.7652	TC	TurbocharᵀAMS	Automatec	6
29.8946	41.5209	34.2046	TC	TurbocharᵀAMS	Automatec	6
23.1009	29.1554	25.4822	NA	Naturally ᵀSA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally ᵀM	Manual	5
21.8931	32.6043	25.6912	TC	TurbocharᵀM	Manual	6
29.6183	41.8508	34.104	TC	TurbocharᵀM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ᵀSA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally ᵀM	Manual	5
28.8556	39.4682	32.8278	TC	TurbocharᵀAMS	Automatec	6
29.6183	41.8508	34.104	TC	TurbocharᵀM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ᵀSA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally ᵀM	Manual	5
30.4633	40.2057	34.1916	TC	TurbocharᵀAMS	Automatec	6
30.8024	42.6219	35.1943	TC	TurbocharᵀM	Manual	6
22.1078	30.6611	25.2814	NA	Naturally ᵀSA	Semi-Auto	6
21.8993	32.1378	25.5642	NA	Naturally ᵀM	Manual	5
19.7174	27.8048	22.6868	NA	Naturally ᵀAMS	Automatec	6
20.6233	26.0617	22.7606	TC	TurbocharᵀSA	Semi-Auto	6
18.1488	26.2617	21.0791	TC	TurbocharᵀM	Manual	6
20.402	25.8545	22.5412	TC	TurbocharᵀSA	Semi-Auto	6
19.649	28.9961	22.9829	TC	TurbocharᵀSA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally ᵀSA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	SupercharᵀSA	Semi-Auto	8



Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Automated Manual with paddles)	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	2-Wheel DDVW XV02.0U5N			5	DU	Diesel, ultr	
N	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDVW XV06.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT03.03UG			5	DU	Diesel, ultr	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0	85		333	GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0	85		333	GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0	85		333	GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0	85		333	GP	Gasoline (F	
N	N	A	All Wheel IDBGT V08.0	10			GPR	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV05.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV05.0	10			GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV05.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV05.0	10			GP	Gasoline (I	

Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXV03.	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	A	All Wheel IDAD XV02.0	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDAD XV02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDAD XV02.0	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXJ02.0	10		GP	Gasoline (F
Y	N	A	All Wheel IDADXT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F

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Annual Fuel Economy	EPA Calculated	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Economy)	Low'd City	Low'd Hwy	Low'd Cor	City2 Unadj
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide					
1700	1700						
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide					
2400	2400	reprocessed to pick up change to A3 quattro carline correction					
2200	2200	corrected forward speed to 8 on this CVT transmission					
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and					
2200	2200						
2200	2200	corrected forward speeds to 8					
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and					
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and					
2200	2200						
2050	2050	corrected forward speeds to 8, for this CVT trans					
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched					
2600	2600						
2700	2700						
2700	2700	added new A7 quattro data to the base level					
2700	2700	added new A7 quattro data to the base level					
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32					
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG					
3150	3150						
2600	2600						
3150	3150						
3150	3150						
2700	2700						
2850	2850						
2700	2700						
2850	2850						
2700	2700						
2850	2850						
2850	2850						
2200	2200						
2200	2200						
2850	2850						
4050	4050	8	13	10			9.5
3150	3150						
4050	4050	8	14	10			10.3
3350	3350						
4050	4050	8	13	10			9.5
4050	4050	8	14	10			10.3
5700	5700						
3550	3550						
3800	3800						
3550	3550	corrected typo unadj comb value					
4050	4050						

2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
1800	1800
2150	2150
2150	2150 corrected annual fuel cost
2400	2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t
1800	1800
2300	2300 corrected annual fuel cost
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers
2700	2700
2850	2850
2300	2300
1700	1700
1700	1700
2050	2050
2050	2050
2600	2600
2100	2100
2300	2300
2100	2100
1700	1700
2150	2150 corrected fuel savings and ratings
1900	1900
2200	2200
1700	1700
2050	2050
2050	2050
1750	1750
1700	1700
2050	2050
2050	2050
1700	1700
1650	1650
2150	2150
2050	2050 CORRECTED 5 YEAR FUEL SAVINGS
2500	2500
2500	2500
2700	2700
2500	2500 CORRECTED ANNUAL FUEL COST
2500	2500
3000	3000
2700	2700

Highway Fuel Economy (City/Highway/Combined) Alternative Fuel  
 Highway Fuel Economy (City/Highway/Combined) Range2 - Fuel2 Use Fuel2 Use Fuel2 Unit Fuel2 Unit

gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
gallons per 100 value...these values were switched

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)MPG	miles per g

o 29 MPG

nd corresponding 5-cycle values



Relative Fuel	2012 EPA	2012 EPA	Description	Intake Val	Exhaust V	Carline CI	Carline CI	Car/Truck Calc	Appr Sales
			SIDI;	2	27	Small Stati	car	Vehicle Specific 5-cycle label	
				2	27	Small Stati	car	Derived 5-cycle label	
			SIDI;	2	27	Small Stati	car	Vehicle Specific 5-cycle label	
			SIDI;	2	27	Small Stati	car	Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Derived 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI; Unde	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI; Unde	2	26	Large Cars car		Vehicle Specific 5-cycle label	
			SIDI;	2	26	Large Cars car		Vehicle Specific 5-cycle label	
			SIDI;	2	27	Small Stati	car	Derived 5-cycle label	
			SIDI;	2	233	Standard SUV 4WD		Derived 5-cycle label	
				2	233	Standard SUV 4WD		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
4650	4650		FFV;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
4650	4650		FFV;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
4650	4650		FFV;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
4650	4650		FFV;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
				2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	

SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	23	Subcompa car	Derived 5-cycle label
	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	23	Subcompa car	Vehicle Specific 5-cycle label
SIDI;	2	23	Subcompa car	Derived 5-cycle label
	2	23	Subcompa car	Derived 5-cycle label
	2	23	Subcompa car	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Derived 5-cycle label
	1	15	Midsize Cacar	Vehicle Specific 5-cycle label
	1	15	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Derived 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	222	Special Pur1	Derived 5-cycle label
SIDI;	2	222	Special Pur1	Vehicle Specific 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label
	2	223	Special Pur1	Vehicle Specific 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label

Release Date	DEPA FE Label Dataset ID	Unique Label	Label Rec	Relabel	Relabel Date	Suppress	Police/Em	Comment
6/11/2012	10148		N	N		N	N	Test Group
6/22/2012	10302		N	N		N	N	
6/11/2012	10147		N	N		N	N	Test Group
6/11/2012	10331		N	N		N	N	ENGINE CC
5/21/2012	10326		N	N		N	N	
5/21/2012	10360		N	N		N	N	
5/21/2012	9974		N	N		N	N	
5/21/2012	10327		N	N		N	N	
5/21/2012	10362		N	N		N	N	
5/21/2012	10363		N	N		N	N	
5/21/2012	9976		N	N		N	N	
6/18/2012	10328		N	N		N	N	
5/21/2012	10364		N	N		N	N	
6/25/2012	10288		N	N		N	N	
6/22/2012	10274		N	N		N	N	
6/22/2012	Previous values were XX MPG city, XX MPG highway, and XX MPG combined; Relabel					N	N	
6/22/2012	Previous values were XX MPG city, XX MPG highway, and XX MPG combined; Relabel					N	N	
8/6/2012	10195		N	N		N	N	
4/26/2012	10276		N	N		N	N	
6/11/2012	10150		N	N		N	N	
7/16/2012	10203		N	N		N	N	
6/8/2012	10077		N	N		N	N	
12/3/2012	10078		N	N		N	N	
5/21/2012	9982		N	N		N	N	
5/21/2012	9985		N	N		N	N	
5/21/2012	9983		N	N		N	N	
5/21/2012	9986		N	N		N	N	
5/21/2012	9984		N	N		N	N	
7/30/2012	10075		N	N		N	N	Engine Coc
7/30/2012	10074		N	N		N	N	Engine Coc
6/18/2012	10166		N	N		N	N	ENGINE CC
6/18/2012	10167		N	N		N	N	ENGINE CC
6/18/2012	10200		N	N		N	N	
3/30/2012	10181		N	N		N	N	Continental
4/9/2012	10208		N	N		N	N	Engine Coc
3/30/2012	10185		N	N		N	N	Continental
4/9/2012	10207		N	N		N	N	Engine Coc
3/30/2012	10183		N	N		N	N	Continental
3/30/2012	10184		N	N		N	N	Continental
7/2/2012	10381		N	N		N	N	CHARGE AI
6/11/2012	10235		N	N		N	N	ENGINE CC
6/22/2012	10237		N	N		N	N	ENGINE C
6/22/2012	10367		N	N		N	N	ENGINE CC
6/22/2012	10238		N	N		N	N	ENGINE C

7/30/2012	10187		N	N	N	N	
6/25/2012	10332		N	N	N	N	
7/30/2012	9628		N	N	N	N	
7/30/2012	9666		N	N	N	N	
7/30/2012	10277		N	N	N	N	
6/25/2012	10333		N	N	N	N	
7/30/2012	9638		N	N	N	N	
1/16/2012	10186		N	N	N	N	
1/25/2012	9110		N	N	N	N	
1/16/2012	9035		N	N	N	N	
1/16/2012	9036		N	N	N	N	
6/11/2012	10160		N	N	N	N	
6/22/2012	10301		N	N	N	N	
6/25/2012	10305		N	N	N	N	
7/30/2012	9627		N	N	N	N	
7/30/2012	9649		N	N	N	N	
6/11/2012	10176		N	N	N	N	ENGINE CC
6/6/2012	10174		N	N	N	N	ENGINE CC
7/30/2012	9770		N	N	N	N	ENGINE CC
6/8/2012	10087		N	N	N	N	
6/22/2012	10300		N	N	N	N	
6/29/2012	10359		N	N	N	N	
6/29/2012	10358		N	N	N	N	
6/6/2012	10073		N	N	N	N	
6/25/2012	10304		N	N	N	N	
7/30/2012	9626		N	N	N	N	
7/30/2012	9648		N	N	N	N	
6/25/2012	10298		N	N	N	N	
6/25/2012	10303		N	N	N	N	
7/30/2012	9625		N	N	N	N	
7/30/2012	9647		N	N	N	N	
6/11/2012	10158		N	N	N	N	SCR Equip
6/18/2012	10163		N	N	N	N	SCR Equip
6/23/2012	10322		N	N	N	N	
6/23/2012	10321		N	N	N	N	
6/11/2012	10159		N	N	N	N	
6/18/2012	10196		N	N	N	N	
6/11/2012	10091		N	N	N	N	
6/11/2012	10086		N	N	N	N	
6/18/2012	10214		N	N	N	N	
6/25/2012	10319		N	N	N	N	
6/25/2012	10257		N	N	N	N	V6 CYLIND

Eng Cnfg	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Energy St	Energy St #	Batterie	Battery Ty
ies as PZEV.	Y	CONTINU	CN						
N	N		N						
ies as PZEV.	Y	CONTINU	CN						
MA ONLY.	Y	CONTINU	CN						
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	Intake and	N						
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CN						
N	N		N						
N	Y	Continuou	N						
N	Y	Continuou	N						
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
Start Stop Equipped. There are 2 turbochargers but 1 common charge air intercooler for both banks. All is located	Deactiv								
Start Stop Equipped. There are 2 turbochargers but 1 common charge air intercooler for both banks. All is located	Deactiv								
MA ONLY.	Y	CONTINU	CN						
MA ONLY.	Y	CONTINU	CN						
N	Y	CONTINU	CN						
Spur	Y	INLET AND	N						
Start Stop Equipped. There are 2 turbochargers but 1 common charge air intercooler for both banks. All is located	Deactiv								
Spur	Y	INLET AND	N						
Start Stop Equipped. There are 2 turbochargers but 1 common charge air intercooler for both banks. All is located	Deactiv								
Spur	Y	INLET AND	N						
Spur	Y	INLET AND	N						
ER (AIR / LIQUID) -- SFI/AIR/4TC/2CA/4MW-TWC/2TWC/4HO2S(2) This configuration is in the Bugatti GT.									
(GALLARDO COUPE AND SPYDER)		INLET AND	N						
EH (GALLARDO COUPE AND SPYDER)		INLET AND	N						
(GALLARDO COUPE AND SPYDER)		INLET AND	N						
EH (GALLARDO COUPE AND SPYDER)		INLET AND	N						

N	Y	position ofN		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
N	Y	position ofN		
N	N	N		
N	Y	INLET CONN		
N	Y	position ofN		
N	Y	position ofN		
N	Y	position ofN		
N	Y	position ofN		
N	Y	CONTINU CN		
N	N	N		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
MA ONLY.	Y	CONTINU CN		
MA ONLY.	Y	CONTINU CN		
MA ONLY.	Y	CONTINU CN		
N	Y	position ofN		
N	N	N		
N	N	N		
N	N	N		
N	Y	position ofN		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
N	N	N		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
N	N	N		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
N	Y	Electronic N		
N	Y	position ofN		
N	Y	position ofN		
N	Y	position ofN		
N	N	N		
N	Y	INTAKE / EN		
NK SYSTEM	Y	MECHANICAL	Battery(s)	1 NiMH

Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit	Regen Br	Regen Br	Regen Br
1	12.0	100.0	100.0	100.0					
2	12.0	100.0	100.0	100.0					
3	12.0	100.0	100.0	100.0					
4	12.0	100.0	100.0	100.0					
5	12.0	100.0	100.0	100.0					
6	12.0	100.0	100.0	100.0					
7	12.0	100.0	100.0	100.0					
8	12.0	100.0	100.0	100.0					
9	12.0	100.0	100.0	100.0					
10	12.0	100.0	100.0	100.0					
11	12.0	100.0	100.0	100.0					
12	12.0	100.0	100.0	100.0					
13	12.0	100.0	100.0	100.0					
14	12.0	100.0	100.0	100.0					
15	12.0	100.0	100.0	100.0					
16	12.0	100.0	100.0	100.0					
17	12.0	100.0	100.0	100.0					
18	12.0	100.0	100.0	100.0					
19	12.0	100.0	100.0	100.0					
20	12.0	100.0	100.0	100.0					
21	12.0	100.0	100.0	100.0					
22	12.0	100.0	100.0	100.0					
23	12.0	100.0	100.0	100.0					
24	12.0	100.0	100.0	100.0					
25	12.0	100.0	100.0	100.0					
26	12.0	100.0	100.0	100.0					
27	12.0	100.0	100.0	100.0					
28	12.0	100.0	100.0	100.0					
29	12.0	100.0	100.0	100.0					
30	12.0	100.0	100.0	100.0					
31	12.0	100.0	100.0	100.0					
32	12.0	100.0	100.0	100.0					
33	12.0	100.0	100.0	100.0					
34	12.0	100.0	100.0	100.0					
35	12.0	100.0	100.0	100.0					
36	12.0	100.0	100.0	100.0					
37	12.0	100.0	100.0	100.0					
38	12.0	100.0	100.0	100.0					
39	12.0	100.0	100.0	100.0					
40	12.0	100.0	100.0	100.0					
41	12.0	100.0	100.0	100.0					
42	12.0	100.0	100.0	100.0					
43	12.0	100.0	100.0	100.0					
44	12.0	100.0	100.0	100.0					
45	12.0	100.0	100.0	100.0					
46	12.0	100.0	100.0	100.0					
47	12.0	100.0	100.0	100.0					
48	12.0	100.0	100.0	100.0					
49	12.0								

d.

horizontal height of the fore intersection behind side of Deck in the vertical direction at 25' scale behind the gear on height of the horizontal height of the fore intersection behind side of Deck in the vertical direction at 25' scale behind the gear on height of the

heights signified the foredune position behind the vegetation. Despite the initial variations in dune characteristics, the dune heights, 50 cm

head was signified by the forelimbs positioned in a high position. Despite the initial orientation of the 2 snakes, the head of the shorter individual, 50 cm

sted

sted

sted  
sted  
djusted  
djusted

sted

sted

sted  
sted  
sted

TRONICALLY

288

6

21.5On-Board

Other

BRAKE PEBoth



brake Source (Front, Rear, Both)  
Driver Cnt Fuel Cell Usable H2 Fuel Cell (HEV-EV C# Drive Motor Ger Motor Ger Rated Motor Fuel Meter

replaced head, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh  
replaced head, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh

replaced head, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh

replaced head, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh

GENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM

1 Other

3 PHASE CI

34

W01 Desc	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell V	Off Board	Camless V	Oil Viscosi	Eng Mgmt	Eng Mgmt	Trans in FE
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	CRDI	Common FN				N	5W40 N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Manual(M
	GDI	Spark IgnitN				N	5W40 N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AV-Si
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Manual(M
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AV-Si
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Manual(M
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AV-Si
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	CRDI	Common F				N	5W30 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Manual(M
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(AM-S
	GDI	Spark IgnitN				N	5W40 N	No		Auto(AM-S
	GDI	Spark IgnitN				N	5W40 N	No		Auto(AM-S
	GDI	Spark IgnitN			N	N	5W40 VW N	No		Manual(M
	MFI	MultipointN				N	5W30 VW N	No		Auto(S6)
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(S8)
	MFI	MultipointN				N	5W30 VW N	No		Auto(S6)
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(S8)
	MFI	MultipointN				N	5W30 VW N	No		Auto(S6)
	MFI	MultipointN				N	5W30 VW N	No		Auto(S6)
	MFI	Multipoint				N	10W60 VVN	No		Auto(S7)
	GDI	Spark Ignit				N	10W60 VVN	No		Auto(AM-S
	GDI	Spark Ignit				N	10W60 VVN	No		Manual(M6
	GDI	Spark Ignit				N	10W60 VVN	No		Auto(AM-S
	GDI	Spark Ignit				N	10W60 VVN	No		Manual(M6

GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
GDI	Spark Ignit		N	5W40 VW N	No	Manual(M
GDI	Spark Ignit		N	5W-40 VWN	No	Auto(S6)
GDI	Spark Ignit		N	5W-40 VWN	No	Auto(S6)
GDI	Spark Ignit		N	5W40 / VVN	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
GDI	Spark Ignit N		N	5W40 N	No	Manual(M
GDI	Spark Ignit N		N	5W40 N	No	Auto(AM-S
GDI	Spark Ignit N		N	5W40 N	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Auto(AM-S
MFI	Multipoint		N	5W40 VW N	No	Auto(S6)
MFI	Multipoint		N	5W40 VW N	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Manual(M
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
CRDI	Common FN		N	5W40 N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
CRDI	Common F		N	5W40 VW N	No	Auto(AM-S
CRDI	Common F		N	5W40 VW N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
GDI	Spark Ignit		N	5W40 VW N	No	Auto(S6)
GDI	Spark Ignit		N	5W40 VW N	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Auto(S6)
CRDI	Common F		N	5W30 VW N	No	Auto(S8)
GDI	Spark Ignit		N	5W40 VW N	No	Auto(S8)
GDI	Spark Ignit N	N	N	5W40 VW N	No	Auto(S8)

MSRP determined by EPA entered after May 18, 2011

Hand as is	Mode type	Charge De	Charge By	Charge Su	Charge Su	EPA Calcul	EPA Calcul	MFR Calcul	EPA Calcul
Auto(AM-S								30.8	
Auto(AM-S								46.2	
Manual(M€A3 frt man								30.4	
Auto(AM-SA3 quattro								30.9	
Auto(AV-Si								35.2	
Auto(S8)								30.8	
Manual(M€								33.2	
Auto(AV-Si								35.2	
Auto(S8)								30.8	
Auto(S8)								30.8	
Manual(Mi								33.2	
Auto(AV-SAudi A6 CV								36.9	
Auto(S8)								30.8	
Auto(S8) Audi A6 qu								28.1	
Auto(S8)								27.5	
Auto(S8)								27.5	
Auto(S8)								27.5	
Auto(S8)								19.3	
Auto(S8)								29.5	
Auto(S8) Audi Q7								22.9	
Auto(S8)								28.1	
Auto(AM-S								23	
Auto(AM-S								22.6	
Auto(AM-S								26.9	
Manual(M€								23.5	
Auto(AM-S								26.9	
Manual(Mi								23.5	
Auto(AM-S								26.4	
Auto(AM-S								25.5	
Auto(AM-S								25.5	
Auto(AM-S TT Coupe c								33.3	
Auto(AM-S TT Coupe c								33.3	
Manual(M€TTRS								25.6	
Auto(S6)								17.2	
Auto(S8)								23.6	
Auto(S6)								17.4	
Auto(S8)								21.8	
Auto(S6)								17.2	
Auto(S6)								17.4	
Auto(S7)								12.6	
Auto(AM-S								19.4	
Manual(M€Gallardo C								17.4	
Auto(AM-S								19.3	
Manual(M€Gallardo S								16.1	

Auto(AM-S	31.8
Manual(M	43.4
Auto(S6)	31.6
Manual(M	31.9
Auto(AM-S	31.5
Manual(M€	43.4
Auto(S6)	30.3
Auto(AM-S	32.3
Manual(M CC M6	31.8
Auto(S6)	25.8
Auto(S6)	24.8
Auto(AM-S	32.4
Auto(AM-S	46.2
Manual(M Jetta Sport	46
Auto(S6)	33.1
Manual(M	32.2
Manual(M	28.5
Auto(AM-S	34.8
Manual(M	31.2
Auto(AM-S	35
Auto(AM-S	46.2
Auto(S6) Jetta Base	32.9
Manual(M	34.7
Manual(M	32.6
Manual(M Jetta Sport	46
Auto(S6)	33.1
Manual(M€	32.2
Auto(AM-S	44.2
Manual(M€ Jetta Sport	46
Auto(S6)	33.1
Manual(M€	32.2
Auto(AM-S	44.6
Manual(M€	46.4
Auto(S6)	31.9
Manual(M€	31.7
Auto(AM-S	28.5
Auto(S6) Tiguan froi	29.9
Manual(M€	26.4
Auto(S6)	29.6
Auto(S8)	23.3
Auto(S8)	25
Auto(S8) Touareg H	28.2

MPG	City	Highway	City CO2	Highway CO2	Comb CO2	CO2-Vol	In CO2	City CO2
6	6		400	432	319	381		333
9	8	3100		336	243	294		259.8
6	6		400	442	296	376		350
6	6		400	442	316	374		325
7	7	600		373	304	342		293.8
6	6		400	437	297	374		345.7
7	7	600		397	276	343		320.4
7	7	600		373	304	342		293.8
6	6		400	437	297	374		345.7
6	6		400	437	297	374		345.7
7	7	600		397	276	343		320.4
7	7	1350		360	272	320		282
6	6		400	437	297	374		345.7
5	5		1400	482	326	412		383.5
5	5		1900	498	321	418		395.5
5	5		1900	498	321	418		395.5
5	5		1900	498	321	418		395.5
3	3		6150	675	430	565		559
6	6		900	450	325	394		352
4	4		4150	573	411	500		461
5	4	1400		541	369	464		446
4	4		4150	562	379	480		466
4	4		4150	5625	398	486		463
5	5		1900	488	321	413		369
5	5		1900	441	355	402		443
5	5		1900	488	321	413		369
5	5		1900	441	355	402		443
5	5		1900	500	341	429		434
5	5		2650	530	330	440		427.3
5	5		2650	530	330	440		427.3
7	7	600		395	284	345		312
7	7	600		395	284	345		312
5	5		2650	499	350	432		419
2	2		8650	787	474	646		649
4	4		4150	590	364	488		466
2	2		8650	768	469	634		639
4	4		5150	638	370	517		510
2	2		8650	787	474	646		649
2	2		8650	768	469	634		639
1	1		16900	1050	599	847		885
3	3		6150	657	447	563		552
3	3		7400	734	511	633		635
3	3		6150	660	446	564		556
2	2		8650	768	452	625		681

6	6	100		401	291	351	334.3
9	8	2600		362	249	311	282
6	6		400	421	310	371	332
9	8	2600		362	249	311	282
6	6	100		403	283	349	327.2
6	6	100		405	257	338	321
9	8	3100		336	243	294	259.8
9	8		3100	338	230	289	261.7
5	5		1400	459	331	401	372
7	7	1100		379	271	331	295
7	7	1100		372	280	331	300.9
9	8	3100		336	243	294	259.8
7	7	850		381	299	344	315
8	8	2100		361	262	316	307
7	7	600		403	272	344	333.9
9	8		3100	338	230	289	261.7
8	7	2850		348	256	307	270
9	8		3100	338	230	289	261.7
9	8	3100		331	240	290	268
9	8	3350		330	239	289	266
6	6	850		401	289	350	328.2
7	7	1350		430	273	359	339.6
6	6		900	449	319	391	372
6	6		900	435	350	397	344
5	5		1900	509	346	436	407
6	6		900	435	343	394	343.7
6	5		900	517	351	443	422
4	4		3400	520	391	462	416
5	5		1900	447	372	413	354



City PHEV Total City PHEV Hwy PHEV				
232	287.6	432	319	381
171.2	219.9	336	243	294
220	291.5	442	296	376
239	286.3	442	316	374
199.8	251.6	373.3	303.6	324.4
218.7	288.6	436.9	296.8	373.9
202.1	267.2	397.1	276.4	342.8
199.8	251.6	373.3	303.6	324.4
218.7	288.6	436.9	296.8	373.9
218.7	288.6	436.9	296.8	373.9
202.1	267.2	397.1	276.4	342.8
189	240	360	272	320
218.7	288.6	436.9	296.8	373.9
233	315.8	481.7	326	411.6
238.7	323.9	498	320.9	418.4
238.7	323.9	498	320.9	418.4
238.7	323.9	498	320.9	418.4
346	463.2	675	430	564.8
238	300.7	444	333	394
296	387	573	412	501
260	362.3	541	369	464
296	389.5	562	379	480
307	392.8	558	398	486
248	329.4	488	321	412.9
266	242.9	440.6	355	402.1
248	329.4	488	321	412.9
266	242.9	440.6	355	402.1
260	355.7	500	341	428.5
251.6	348.3	530.4	329.7	439.5
251.6	348.3	530.4	329.7	439.5
210	266	395	284	344.6
210	266	395	284	344.6
259	347	498.9	350.4	432.1
361	519.4	787	474	646
265	375.6	590	364	488.3
359	513	768	469	634
288	410.1	638	370	517.4
361	519.4	787	474	646
359	513	768	469	634
495	709.5	1050.2	598.8	847.1
349	460.7	657	447	563
370	515.8	734	511	633
348	462.4	660	446	564
391	550.5	768	452	625

211.2	278.9	401	290.6	351.3
175.7	234.2	361.9	248.8	311

220.9	282	421	310	371
175.7	234.2	361.9	248.8	311

207.7	273.4	402.8	282.7	348.8
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213	272.4	405	257	338
171.2	219.9	336	243	294
170	220.5	337.9	229.6	289.2

240	312.6	459	331	401
203	254	379	271	331

198.4	254.8	372	280.4	330.6
171.2	219.9	336	243	294
214	269.6	381.3	298.8	344.2
192	255.3	360.5	262	316.2
197.2	272.4	403.3	271.8	344.3
170	220.5	337.9	229.6	289.2

181	230	348	256	307
170	220.5	337.9	229.6	289.2

179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.3
206.8	279.9	429.9	273.1	359.3
238	311.7	449	319	391
251	302	435	350	397
248	335.5	509	346	436
246.1	299.8	435	343	394
248	343.7	517	351	443
281	355.3	520.1	390.6	461.8
267	314.9	447	372	413

City	MPG	Distance	Comb Vol	Higher	Final Label	EPA calcul	Error? (EP	EPA_FUEL	EPA_GHG	MFR	EPA
N			4.2		4.2	4.2	0				
N			2.9		2.9	2.9	0				
N			4.2		4.2	4.2	0				
N			4.2		4.2	4.2	0				
N			3.8		3.8	3.8	0				
N			4.2		4.2	4.2	0				
N			3.8		3.8	3.8	0				
N			3.8		3.8	3.8	0				
N			4.2		4.2	4.2	0				
N			4.2		4.2	4.2	0				
N			3.8		3.8	3.8	0				
N			3.6		3.6	3.6	0				
N			4.2		4.2	4.2	0				
N			4.5		4.5	4.5	0				
N			4.8		4.8	4.8	0				
N			4.8		4.8	4.8	0				
N			4.8		4.8	4.8	0				
N			6.3		6.3	6.3	0				
N			4.3		4.3	4.3	0				
N			5.6		5.6	5.6	0				
N			4.5		4.5	4.5	0				
N			5.6		5.6	5.6	0				
N			5.6		5.6	5.6	0				
N			4.8		4.8	4.8	0				
N			5		5	5	0				
N			4.8		4.8	4.8	0				
N			5		5	5	0				
N			4.8		4.8	4.8	0				
N			5		5	5	0				
N			5		5	5	0				
N			3.8		3.8	3.8	0				
N			3.8		3.8	3.8	0				
N			5		5	5	0				
N			7.1		7.1	7.1	0				
N			5.6		5.6	5.6	0				
N			7.1		7.1	7.1	0				
N			5.9		5.9	5.9	0				
N			7.1		7.1	7.1	0				
N			7.1		7.1	7.1	0				
N			10		10	10	0				
N			6.3		6.3	6.3	0				
N			6.7		6.7	6.7	0				
N			6.3		6.3	6.3	0				
N			7.1		7.1	7.1	0				

N	4	4	4	0
N	3.1	3.1	3.1	0
			4	
			4	
N	4.2	4.2	4.2	0
N	3.1	3.1	3.1	0
			4.3	
N	4	4	4	0
			4	
			4.8	
			5	
N	4	4	4	0
N	2.9	2.9	2.9	0
N	2.9	2.9	2.9	0
			3.8	
			3.8	
N	4.5	4.5	4.5	0
N	3.7	3.7	3.7	0
			4	
N	3.7	3.7	3.7	0
N	2.9	2.9	2.9	0
N	4	4	4	0
N	3.6	3.6	3.6	0
N	3.8	3.8	3.8	0
N	2.9	2.9	2.9	0
			3.8	
			3.8	
N	3	3	3	0
N	2.9	2.9	2.9	0
			3.8	
			3.8	
N	2.9	2.9	2.9	0
N	2.9	2.9	2.9	0
N	4	4	4	0
N	3.8	3.8	3.8	0
N	4.3	4.3	4.3	0
N	4.3	4.3	4.3	0
N	4.8	4.8	4.8	0
N	4.3	4.3	4.3	0
N	4.3	4.3	4.3	0
N	5.3	5.3	5.3	0
N	4.8	4.8	4.8	0





EPAMUNITEP\_A\_Q2NRIEPA\_ADJ\_EPA\_PHEVLabel Subn

Mr. Richard E Thomas Jr.

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**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com; CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA; CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA; CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Tue 7/3/2012 4:10:33 PM  
**Subject:** re: 2013 FE Guide Errors in Verify; Many errors when calculating adjusted combined fuel consumption(gal/100 miles); Request to update any 2013 Labels submitted before May 11, 2012  
[VW Group 2013 FE Guide1-all rel dates-no-sales-06-29-2012 PLUS new Rel10 fields.xlsx](#)

Richard,

As we discussed over the phone yesterday---you were one of the few manufacturers who calculated fuel consumption correctly---good Job!

Dave

1. Errors in Verify: Attached is a spreadsheet with the 2013 FE Label errors in Verify as of June 29, 2012. The spreadsheet contains all the 2013 FE Label data in Verify as of June 29, 2012 including some of the new Release 10 fields (columns 141-184). Color coding is explained in the heading for each column, except for the various shades of green. Labels with errors are highlighted in green fill in the first few columns or almost all columns---with the field where the error occurred highlighted in yellow fill. [Normal Green (not pea green) means the error occurred in the Combined Adjusted Fuel Consumption (gal/100 miles) field.]

When you get a chance, please correct the errors--so I can forward the corrected data to DOE for posting on the web on the 1st and 15th of each month.

2. Errors in Combined Adjusted Fuel Consumption: I'm finding a lot of errors in the new field "Adjusted Combined Model Type Fuel Consumption" (column 165 of the attached spreadsheet). EPA calculated fuel consumption is in column 166. Some manufacturers are entering fuel economy values (mpg) values instead of fuel consumption (gallons per 100 miles). Some manufacturers are incorrectly calculating fuel consumption using the (incorrect) unrounded adjusted combined mpg value instead of the correct rounded adjusted combined mpg value (as prominently displayed on 2013 labels (window stickers)---as explained in more detail in Item 3, below.

When you get a chance, please correct the fuel consumption errors in Verify. [Note that I'm not currently sending fuel consumption values to DOE for posting on the web, so I don't need the fuel consumption errors corrected immediately. Please correct them as soon as possible, but if you need 2-3 weeks to correct them, that's OK with me.]

If there are errors in the fuel consumption value listed on the actual labels (window stickers) of your vehicles, please correct the labels as soon as practicable. Call or email me if you have questions about the fuel consumption values shown on the actual labels (window stickers) of your vehicles.

3. Mistake in the EPA Regulations for Calculating Fuel Consumption (600.311-12(c): For conventional vehicles (not EVs or PHEVs), there is a mistake in the current regulations at 600.311-12(c) which EPA proposed to correct in the 2017 greenhouse gas proposal (page 76FR 75392, Dec 1, 2011).

The current (incorrect) regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The unrounded value for combined fuel economy from 600.210-12(c)."

The (correct) proposed regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The value for combined fuel economy from 600.210-12(c) rounded to the nearest whole mpg." Please use the voluntarily lowered combined adjusted MPG value, if applicable.

We are making this change for several reasons, e.g. so that customers will be able to accurately calculate the fuel consumption of their vehicle from the information displayed on the label; so that two vehicles with the same combined fuel economy mpg values won't have different fuel consumption values displayed on the label, etc. One benefit to manufacturers and EPA is that this correction will result in fewer questions from consumers about how the fuel consumption values are calculated.

4. Request to update any 2013 FE Labels submitted to Verify before May 11, 2012: EPA and DOE are in the process of updating the information displayed at [www.fueleconomy.gov](http://www.fueleconomy.gov) to show the same type of information which is displayed on the 2013 window stickers, e.g. Fuel Economy (1-10) rating, Greenhouse Gas (1-10) Rating, Smog (1-10) rating, adjusted combined fuel consumption (values, adjusted combined CO2 (grams/mile) values, amount saved (or spent) over 5 years, battery charging time for EVs & PHEVs, etc. We anticipate that the website will be updated within the next couple of months. For this reason, we are requesting that manufacturers update any labels which were entered into EPA's Verify data base prior to May 11, 2012 (Verify Release 9 labels which don't contain this information).

If possible, please try to update those labels before August 6, 2012. Please call or email me if you need more time to update your labels.

Thanks

EPA comr	VERIFY cc	Model Yr	Mfr Name	Division	ICarline	Verify Mfr Index	Mo Eng Displ # Cyl	
		2013	Audi	Audi	A3	ADX	59	2.0 4
Diesel;		2013	Audi	Audi	A3	ADX	73	2.0 4
		2013	Audi	Audi	A3	ADX	58	2.0 4
		2013	Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013	Audi	Audi	A4	ADX	35	2.0 4
		2013	Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013	Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013	Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013	Audi	Audi	A5 Cabriolet	ADX	39	2.0 4
		2013	Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013	Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013	Audi	Audi	A6	ADX	65	2.0 4
		2013	Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013	Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013	Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled. Please include in 2013		2013	Audi	Audi	A8	ADX	128	3.0 6
Relabeled. Please include in 2013		2013	Audi	Audi	A8L	ADX	129	3.0 6
		2013	Audi	Audi	A8L	ADX	109	6.3 12
		2013	Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013	Audi	Audi	Q7	ADX	61	3.0 6
Diesel;		2013	Audi	Audi	Q7	ADX	53	3.0 6
		2013	Audi	Audi	RS5	ADX	49	4.2 8
Error in City		2013	Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
		2013	Audi	Audi	S4	ADX	42	3.0 6
		2013	Audi	Audi	S4	ADX	45	3.0 6
		2013	Audi	Audi	S5	ADX	43	3.0 6
		2013	Audi	Audi	S5	ADX	46	3.0 6
		2013	Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013	Audi	Audi	S6	ADX	48	4.0 8
		2013	Audi	Audi	S7	ADX	47	4.0 8
		2013	Audi	Audi	TT Coupe	ADX	66	2.0 4
		2013	Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013	Audi	Audi	TTRS Coup	ADX	69	2.5 5
		2013	Bentley	Bentley Motors	Continental	BEX	110	6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	108	4.0 8
		2013	Bentley	Bentley Motors	Continental	BEX	113	6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	107	4.0 8
		2013	Bentley	Bentley Motors	Continental	BEX	111	6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	112	6.0 12
Warning - if trans type is Automatic		2013	Bugatti	Bugatti	Veyron	BGT	88	8.0 16
		2013	Lamborghini	Lamborghini	Gallardo C	NLX	30	5.2 10
		2013	Lamborghini	Lamborghini	Gallardo C	NLX	32	5.2 10
		2013	Lamborghini	Lamborghini	Gallardo S	NLX	31	5.2 10
		2013	Lamborghini	Lamborghini	Gallardo S	NLX	33	5.2 10

Diesel;	2013 Volkswagen Volkswagen	BEETLE	VWX	19	2.0	4
	2013 Volkswagen Volkswagen	BEETLE	VWX	84	2.0	4
	2013 Volkswagen Volkswagen	BEETLE	VWX	17	2.5	5
	2013 Volkswagen Volkswagen	BEETLE	VWX	27	2.5	5
Diesel;	2013 Volkswagen Volkswagen	BEETLE CO	VWX	20	2.0	4
	2013 Volkswagen Volkswagen	BEETLE CO	VWX	85	2.0	4
	2013 Volkswagen Volkswagen	BEETLE CO	VWX	18	2.5	5
	2013 Volkswagen Volkswagen	CC	VWX	1	2.0	4
Diesel;	2013 Volkswagen Volkswagen	CC	VWX	4	2.0	4
	2013 Volkswagen Volkswagen	CC	VWX	2	3.6	6
	2013 Volkswagen Volkswagen	CC 4MOTI	VWX	3	3.6	6
	2013 Volkswagen Volkswagen	Eos	VWX	21	2.0	4
Diesel;	2013 Volkswagen Volkswagen	GOLF	VWX	72	2.0	4
	2013 Volkswagen Volkswagen	GOLF	VWX	81	2.0	4
	2013 Volkswagen Volkswagen	GOLF	VWX	16	2.5	5
	2013 Volkswagen Volkswagen	GOLF	VWX	26	2.5	5
Diesel;	2013 Volkswagen Volkswagen	Golf R	VWX	57	2.0	4
	2013 Volkswagen Volkswagen	GTI	VWX	22	2.0	4
	2013 Volkswagen Volkswagen	GTI	VWX	23	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	50	2.0	4
Diesel;	2013 Volkswagen Volkswagen	Jetta	VWX	71	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	86	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	87	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	51	2.0	4
Diesel;	2013 Volkswagen Volkswagen	Jetta	VWX	80	2.0	4
	2013 Volkswagen Volkswagen	Jetta	VWX	15	2.5	5
	2013 Volkswagen Volkswagen	Jetta	VWX	25	2.5	5
	2013 Volkswagen Volkswagen	JETTA SPO	VWX	74	2.0	4
Diesel;	2013 Volkswagen Volkswagen	JETTA SPO	VWX	79	2.0	4
	2013 Volkswagen Volkswagen	JETTA SPO	VWX	14	2.5	5
	2013 Volkswagen Volkswagen	JETTA SPO	VWX	24	2.5	5
	2013 Volkswagen Volkswagen	Passat	VWX	62	2.0	4
Diesel;	2013 Volkswagen Volkswagen	Passat	VWX	64	2.0	4
	2013 Volkswagen Volkswagen	Passat	VWX	83	2.5	5
	2013 Volkswagen Volkswagen	Passat	VWX	82	2.5	5
	2013 Volkswagen Volkswagen	Passat	VWX	63	3.6	6
Diesel;	2013 Volkswagen Volkswagen	TIGUAN	VWX	68	2.0	4
	2013 Volkswagen Volkswagen	TIGUAN	VWX	56	2.0	4
	2013 Volkswagen Volkswagen	TIGUAN 4M	VWX	55	2.0	4
	2013 Volkswagen Volkswagen	TOUAREG	VWX	54	3.0	6
Hybrid;	2013 Volkswagen Volkswagen	TOUAREG	VWX	78	3.6	6
	2013 Volkswagen Volkswagen	Touareg H	VWX	75	3.0	6

Trans in FE	City FE (G	Hwy FE (C	Comb FE (L	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Auto(AM-S	30	42	34				39.0935	59.3437	46.1856
Manual(M	21	30	24				25.3	40.3	30.3902
Auto(AM-S	21	28	24				27.2	37.1	30.9119
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S	16	23	18				19.1	30	22.8332
Auto(AM-S	16	22	18				19.2	28.9	22.6159
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				18.9	33.4	23.4887
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				18.9	33.4	23.4887
Auto(AM-S	18	26	21				22.1	34.7	26.4165
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Manual(M	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S7)	8	15	10				10	17.9	12.4782
Auto(AM-S	13	20	16				16.1	25.4	19.276
Manual(M	12	20	15				14	24	17.2308
Auto(AM-S	13	20	16				16	25.4	19.197
Manual(M	12	20	14				13	22.6	16.0722

Auto(AM-S	22	30	25	26.5	42.0656	31.7942
Manual(M	28	41	32	35.9976	57.8604	43.3724
Auto(S6)	22	29	25	27.3831	39.0128	31.6255
Manual(M	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
Manual(M	28	41	32	35.9976	57.8604	43.3724
Auto(S6)	21	27	23	26.0395	37.7702	30.2701
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M	21	32	25	25.7923	44.3415	31.7736
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Manual(M	19	27	22	23.9	37.1	28.456
Auto(AM-S	24	33	27	29.9333	43.5096	34.8229
Manual(M	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M	24	34	28	28.8	46.2	34.6771
Manual(M	22	33	26	26.5556	44.9945	32.56
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	29	39	33	37.6	56.2	44.1798
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Model	Fuel	City	Highway	Unrd Comb	Unrd	Guzzler?	Air Aspir	IAir Aspir	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286						TC	Turbochar	AMS	Automate		6
29.8946	41.5209	34.2046						TC	Turbochar	AMS	Automate		6
20.8146	29.9953	24.1394						TC	Turbochar	M	Manual		6
20.891	28.1035	23.6187						TC	Turbochar	AMS	Automate		6
23.6355	30.6684	26.3554						TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508						TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049						TC	Turbochar	M	Manual		6
23.6355	30.6684	26.3554						TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508						TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508						TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049						TC	Turbochar	M	Manual		6
24.5044	32.5529	27.5721						TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508						TC	Turbochar	SA	Semi-Auto		8
18.3949	27.2332	21.5408						SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758						SC	Superchar	SA	Semi-Auto		8
8(1)(4) reasons; Please revise release date to the effective date when vehicles were relabelled;	27.3458	21.1758						SC	Superchar	SA	Semi-Auto		8
8(1)(4) reasons; Please revise release date to the effective date when vehicles were relabelled;	27.3458	21.1758						SC	Superchar	SA	Semi-Auto		8
13.1387	20.6025	15.6978	G					NA	Naturally	SA	Semi-Auto		8
19.9584	26.6824	22.5112						TC	Turbochar	SA	Semi-Auto		8
15.522	21.5458	17.7559						SC	Superchar	SA	Semi-Auto		8
18.74	27.62	21.9099						TC	Turbochar	SA	Semi-Auto		8
15.7409	23.3075	18.4339						NA	Naturally	AMS	Automate		7
15.8793	22.1836	18.2078						NA	Naturally	AMS	Automate		7
18.117	27.558	21.419						SC	Superchar	AMS	Automate		7
17.0438	26.023	20.1767						SC	Superchar	M	Manual		6
18.117	27.558	21.419						SC	Superchar	AMS	Automate		7
17.0438	26.023	20.1767						SC	Superchar	M	Manual		6
17.6699	25.953	20.6333						SC	Superchar	AMS	Automate		7
16.761	26.9697	20.2022						TC	Turbochar	AMS	Automate		7
16.761	26.9697	20.2022						TC	Turbochar	AMS	Automate		7
22.407	31.1674	25.6515						TC	Turbochar	AMS	Automate		6
22.407	31.1674	25.6515						TC	Turbochar	AMS	Automate		6
17.751	25.2021	20.4751						TC	Turbochar	M	Manual		6
11.2476	18.7327	13.7134	G					TC	Turbochar	SA	Semi-Auto		6
15.0109	24.4645	18.1706						TC	Turbochar	SA	Semi-Auto		8
11.5043	18.877	13.9574	G					TC	Turbochar	SA	Semi-Auto		6
14.0639	23.9773	17.2766	G					TC	Turbochar	SA	Semi-Auto		8
11.2476	18.7327	13.7134	G					TC	Turbochar	SA	Semi-Auto		6
11.5043	18.877	13.9574	G					TC	Turbochar	SA	Semi-Auto		6
8.4232	14.7698	10.4424	G					TC	Turbochar	SA	Semi-Auto		7
13.4655	19.7573	15.718	G					NA	Naturally	AMS	Automate		6
12.0883	19.9831	14.7021	G					NA	Naturally	AM	Manual		6
13.3954	19.7741	15.6701	G					NA	Naturally	AMS	Automate		6
11.5388	19.5451	14.1465	G					NA	Naturally	AM	Manual		6

22.0202	29.5574	24.8746	TC	TurbocharᵀAMS	Automatec	6
27.7387	40.5954	32.349	TC	TurbocharᵀM	Manual	6
22.2863	28.5683	24.7338	NA	Naturally ᵀSA	Semi-Auto	6
21.7202	30.6767	25.0054	NA	Naturally ᵀM	Manual	5
21.1383	28.6751	23.9738	TC	TurbocharᵀAMS	Automatec	6
27.7387	40.5954	32.349	TC	TurbocharᵀM	Manual	6
21.2302	26.9749	23.4804	NA	Naturally ᵀSA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	TurbocharᵀAMS	Automatec	6
20.9361	31.656	24.7	TC	TurbocharᵀM	Manual	6
17.4935	26.5716	20.6716	NA	Naturally ᵀSA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally ᵀSA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	TurbocharᵀAMS	Automatec	6
29.8946	41.5209	34.2046	TC	TurbocharᵀAMS	Automatec	6
29.6183	41.8508	34.104	TC	TurbocharᵀM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ᵀSA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally ᵀM	Manual	5
19.278	26.8882	22.0917	TC	TurbocharᵀM	Manual	6
24.2237	32.5108	27.3624	TC	TurbocharᵀAMS	Automatec	6
21.2839	30.8324	24.7304	TC	TurbocharᵀM	Manual	6
23.7854	31.6043	26.7652	TC	TurbocharᵀAMS	Automatec	6
29.8946	41.5209	34.2046	TC	TurbocharᵀAMS	Automatec	6
23.1009	29.1554	25.4822	NA	Naturally ᵀSA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally ᵀM	Manual	5
21.8931	32.6043	25.6912	TC	TurbocharᵀM	Manual	6
29.6183	41.8508	34.104	TC	TurbocharᵀM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ᵀSA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally ᵀM	Manual	5
28.8556	39.4682	32.8278	TC	TurbocharᵀAMS	Automatec	6
29.6183	41.8508	34.104	TC	TurbocharᵀM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ᵀSA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally ᵀM	Manual	5
30.4633	40.2057	34.1916	TC	TurbocharᵀAMS	Automatec	6
30.8024	42.6219	35.1943	TC	TurbocharᵀM	Manual	6
22.1078	30.6611	25.2814	NA	Naturally ᵀSA	Semi-Auto	6
21.8993	32.1378	25.5642	NA	Naturally ᵀM	Manual	5
19.7174	27.8048	22.6868	NA	Naturally ᵀAMS	Automatec	6
20.6233	26.0617	22.7606	TC	TurbocharᵀSA	Semi-Auto	6
18.1488	26.2617	21.0791	TC	TurbocharᵀM	Manual	6
20.402	25.8545	22.5412	TC	TurbocharᵀSA	Semi-Auto	6
19.649	28.9961	22.9829	TC	TurbocharᵀSA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally ᵀSA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	SupercharᵀSA	Semi-Auto	8



Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Automated Manual with paddles)	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	2-Wheel DDVW XV02.0U5N			5	DU	Diesel, ultr	
N	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDVW XV06.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT03.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT03.03UG			5	DU	Diesel, ultr	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0	85		333	GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0	85		333	GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0	10			GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0	85		333	GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0	85		333	GP	Gasoline (F	
N	N	A	All Wheel IDBGT V08.0	10			GPR	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV05.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV05.0	10			GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV05.0	10			GP	Gasoline (F	
N	N	A	All Wheel IDAD XV05.0	10			GP	Gasoline (I	

Automated Manual with paddles)	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y N F	2-Wheel DDVWXV03.0	10		GP	Gasoline (F
Y N A	All Wheel IDVWXV03.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXV02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
N N A	All Wheel IDAD XV02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel DDAD XV02.0	10		GP	Gasoline (F
N N F	2-Wheel DDAD XV02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
N N F	2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXV03.0	10		GP	Gasoline (F
Y N F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y N A	All Wheel IDVWXJ02.0	10		GP	Gasoline (F
Y N A	All Wheel IDADXT03.02UG		5	DU	Diesel, ultr
Y N A	All Wheel IDVWXT03.0	10		GP	Gasoline (F
Y N A	All Wheel IDVWXT03.0	10		GP	Gasoline (F

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Annual Fuel Economy	EPA Calculated	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Economy)	Low'd City	Low'd Hwy	Low'd Cor	City2 Unadj
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide					
1700	1700						
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide					
2400	2400	reprocessed to pick up change to A3 quattro carline correction					
2200	2200	corrected forward speed to 8 on this CVT transmission					
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and					
2200	2200						
2200	2200	corrected forward speeds to 8					
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and					
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and					
2200	2200						
2050	2050	corrected forward speeds to 8, for this CVT trans					
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched					
2600	2600						
2700	2700						
2700	2700	added new A7 quattro data to the base level					
2700	2700	added new A7 quattro data to the base level					
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32					
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG					
3150	3150						
2600	2600						
3150	3150						
3150	3150						
2700	2700						
2850	2850						
2700	2700						
2850	2850						
2700	2700						
2850	2850						
2850	2850						
2200	2200						
2200	2200						
2850	2850						
4050	4050	8	13	10			9.5
3150	3150						
4050	4050	8	14	10			10.3
3350	3350						
4050	4050	8	13	10			9.5
4050	4050	8	14	10			10.3
5700	5700						
3550	3550						
3800	3800						
3550	3550	corrected typo unadj comb value					
4050	4050						

2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
1800	1800
2150	2150
2150	2150 corrected annual fuel cost
2400	2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t
1800	1800
2300	2300 corrected annual fuel cost
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers
2700	2700
2850	2850
2300	2300
1700	1700
1700	1700
2050	2050
2050	2050
2600	2600
2100	2100
2300	2300
2100	2100
1700	1700
2150	2150 corrected fuel savings and ratings
1900	1900
2200	2200
1700	1700
2050	2050
2050	2050
1750	1750
1700	1700
2050	2050
2050	2050
1700	1700
1650	1650
2150	2150
2050	2050 CORRECTED 5 YEAR FUEL SAVINGS
2500	2500
2500	2500
2700	2700
2500	2500 CORRECTED ANNUAL FUEL COST
2500	2500
3000	3000
2700	2700

gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
gallons per 100 value...these values were switched

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)MPG	miles per gallon
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)MPG	miles per gallon
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)MPG	miles per gallon
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)MPG	miles per gallon

o 29 MPG

nd corresponding 5-cycle values



Relative Fuel	2012 EPA	2012 EPA	Description	Intake Val	Exhaust V	Carline CI	Carline CI	Car/Truck Calc	Appr Sales
			SIDI;	2	27	Small Stati	car	Vehicle Specific 5-cycle label	
				2	27	Small Stati	car	Derived 5-cycle label	
			SIDI;	2	27	Small Stati	car	Vehicle Specific 5-cycle label	
			SIDI;	2	27	Small Stati	car	Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Derived 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI; Unde	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI; Unde	2	26	Large Cars car		Vehicle Specific 5-cycle label	
			SIDI;	2	26	Large Cars car		Vehicle Specific 5-cycle label	
			SIDI;	2	27	Small Stati	car	Derived 5-cycle label	
			SIDI;	2	233	Standard SUV 4WD		Derived 5-cycle label	
				2	233	Standard SUV 4WD		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
4650	4650		FFV;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
			SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
4650	4650		FFV;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
			SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
4650	4650		FFV;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
4650	4650		FFV;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
				2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	
			SIDI;	2	21	Two Seatecar		Vehicle Specific 5-cycle label	

SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	23	Subcompa car	Derived 5-cycle label
	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	23	Subcompa car	Vehicle Specific 5-cycle label
SIDI;	2	23	Subcompa car	Derived 5-cycle label
	2	23	Subcompa car	Derived 5-cycle label
	2	23	Subcompa car	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Derived 5-cycle label
	1	15	Midsize Cacar	Vehicle Specific 5-cycle label
	1	15	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Derived 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	222	Special Pur1	Derived 5-cycle label
SIDI;	2	222	Special Pur1	Vehicle Specific 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label
	2	223	Special Pur1	Vehicle Specific 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label

Release Date	DEPA FE Label Dataset ID	Unique Label	Label Rec	Relabel	Relabel Date	Suppress	Police/Em	Comment
6/11/2012	10148		N	N		N	N	Test Group
6/22/2012	10302		N	N		N	N	
6/11/2012	10147		N	N		N	N	Test Group
6/11/2012	10331		N	N		N	N	ENGINE CC
5/21/2012	10326		N	N		N	N	
5/21/2012	10360		N	N		N	N	
5/21/2012	9974		N	N		N	N	
5/21/2012	10327		N	N		N	N	
5/21/2012	10362		N	N		N	N	
5/21/2012	10363		N	N		N	N	
5/21/2012	9976		N	N		N	N	
6/18/2012	10328		N	N		N	N	
5/21/2012	10364		N	N		N	N	
6/25/2012	10288		N	N		N	N	
6/22/2012	10274		N	N		N	N	
6/22/2012	10275		N	N		N	N	Previous values were XX MPG city, XX MPG highway, and XX MPG combined; Relabel
6/22/2012	10276		N	N		N	N	Previous values were XX MPG city, XX MPG highway, and XX MPG combined; Relabel
8/6/2012	10195		N	N		N	N	
4/26/2012	10276		N	N		N	N	
6/11/2012	10150		N	N		N	N	
7/16/2012	10203		N	N		N	N	
6/8/2012	10077		N	N		N	N	
12/3/2012	10078		N	N		N	N	
5/21/2012	9982		N	N		N	N	
5/21/2012	9985		N	N		N	N	
5/21/2012	9983		N	N		N	N	
5/21/2012	9986		N	N		N	N	
5/21/2012	9984		N	N		N	N	
7/30/2012	10075		N	N		N	N	Engine Coc
7/30/2012	10074		N	N		N	N	Engine Coc
6/18/2012	10166		N	N		N	N	ENGINE CC
6/18/2012	10167		N	N		N	N	ENGINE CC
6/18/2012	10200		N	N		N	N	
3/30/2012	10181		N	N		N	N	Continental
4/9/2012	10208		N	N		N	N	Engine Coc
3/30/2012	10185		N	N		N	N	Continental
4/9/2012	10207		N	N		N	N	Engine Coc
3/30/2012	10183		N	N		N	N	Continental
3/30/2012	10184		N	N		N	N	Continental
7/2/2012	10381		N	N		N	N	CHARGE AI
6/11/2012	10235		N	N		N	N	ENGINE CC
6/22/2012	10237		N	N		N	N	ENGINE C
6/22/2012	10367		N	N		N	N	ENGINE CC
6/22/2012	10238		N	N		N	N	ENGINE C

7/30/2012	10187		N	N	N	N	
6/25/2012	10332		N	N	N	N	
7/30/2012	9628		N	N	N	N	
7/30/2012	9666		N	N	N	N	
7/30/2012	10277		N	N	N	N	
6/25/2012	10333		N	N	N	N	
7/30/2012	9638		N	N	N	N	
1/16/2012	10186		N	N	N	N	
1/25/2012	9110		N	N	N	N	
1/16/2012	9035		N	N	N	N	
1/16/2012	9036		N	N	N	N	
6/11/2012	10160		N	N	N	N	
6/22/2012	10301		N	N	N	N	
6/25/2012	10305		N	N	N	N	
7/30/2012	9627		N	N	N	N	
7/30/2012	9649		N	N	N	N	
6/11/2012	10176		N	N	N	N	ENGINE CC
6/6/2012	10174		N	N	N	N	ENGINE CC
7/30/2012	9770		N	N	N	N	ENGINE CC
6/8/2012	10087		N	N	N	N	
6/22/2012	10300		N	N	N	N	
6/29/2012	10359		N	N	N	N	
6/29/2012	10358		N	N	N	N	
6/6/2012	10073		N	N	N	N	
6/25/2012	10304		N	N	N	N	
7/30/2012	9626		N	N	N	N	
7/30/2012	9648		N	N	N	N	
6/25/2012	10298		N	N	N	N	
6/25/2012	10303		N	N	N	N	
7/30/2012	9625		N	N	N	N	
7/30/2012	9647		N	N	N	N	
6/11/2012	10158		N	N	N	N	SCR Equip
6/18/2012	10163		N	N	N	N	SCR Equip
6/23/2012	10322		N	N	N	N	
6/23/2012	10321		N	N	N	N	
6/11/2012	10159		N	N	N	N	
6/18/2012	10196		N	N	N	N	
6/11/2012	10091		N	N	N	N	
6/11/2012	10086		N	N	N	N	
6/18/2012	10214		N	N	N	N	
6/25/2012	10319		N	N	N	N	
6/25/2012	10257		N	N	N	N	V6 CYLIND

Eng Cnfg	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Energy St	Energy St #	Batterie	Battery Ty
ies as PZEV.	Y	CONTINU	CN						
N	N		N						
ies as PZEV.	Y	CONTINU	CN						
MA ONLY.	Y	CONTINU	CN						
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	Intake and	N						
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CN						
N	N		N						
N	Y	Continuou	N						
N	Y	Continuou	N						
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
N	Y	CONTINU	CY	AUDI VALV					
Start Stop Equipped. There are 2 turbochargers but 1 common charge air intercooler for both banks. All is located	Deactiv								
Start Stop Equipped. There are 2 turbochargers but 1 common charge air intercooler for both banks. All is located	Deactiv								
MA ONLY.	Y	CONTINU	CN						
MA ONLY.	Y	CONTINU	CN						
N	Y	CONTINU	CN						
Spur	Y	INLET AND	N						
Start Stop Equipped. There are 2 turbochargers but 1 common charge air intercooler for both banks. All is located	Deactiv								
Spur	Y	INLET AND	N						
Start Stop Equipped. There are 2 turbochargers but 1 common charge air intercooler for both banks. All is located	Deactiv								
Spur	Y	INLET AND	N						
Spur	Y	INLET AND	N						
ER (AIR / LIQUID) -- SFI/AIR/4TC/2CA/4MW-TWC/2TWC/4HO2S(2) This configuration is in the Bugatti GT.									
(GALLARDO COUPE AND SPYDER)		INLET AND	N						
EH (GALLARDO COUPE AND SPYDER)		INLET AND	N						
(GALLARDO COUPE AND SPYDER)		INLET AND	N						
EH (GALLARDO COUPE AND SPYDER)		INLET AND	N						

N	Y	position ofN		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
N	Y	position ofN		
N	N	N		
N	Y	INLET CONN		
N	Y	position ofN		
N	Y	position ofN		
N	Y	position ofN		
N	Y	position ofN		
N	Y	CONTINU CN		
N	N	N		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
MA ONLY.	Y	CONTINU CN		
MA ONLY.	Y	CONTINU CN		
MA ONLY.	Y	CONTINU CN		
N	Y	position ofN		
N	N	N		
N	N	N		
N	N	N		
N	Y	position ofN		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
N	N	N		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
N	N	N		
N	N	N		
N	Y	INLET CONN		
N	Y	INLET CONN		
N	Y	Electronic N		
N	Y	position ofN		
N	Y	position ofN		
N	Y	position ofN		
N	N	N		
N	Y	INTAKE / EN		
NK SYSTEM	Y	MECHANICAL	Battery(s)	1 NiMH

Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit	Regen Br	Regen Br	Regen Br
------------	------------	-----------	-----------	-----------	---------	-----------	----------	----------	----------

d.

~~horizontal height of the forelimb joint on both sides of the body in the initial position at rest as indicated by the horizontal height of the forelimb joint on both sides of the body in the initial position at rest~~

heights signified the foredune position behind the vegetation. Despite the initial variations in dune characteristics, the dune heights, 50 cm

head was signified by the forelimbs positioned in a high position. Despite the initial orientation of the 2 snakes, the head of the shorter giraffe, 50 cm

sted

sted

sted  
sted  
djusted  
djusted

sted

sted

sted  
sted  
sted

TRONICALLY

288

6

21.5On-Board

Other

BRAKE PEBoth



brake Source (Front, Rear, Both)  
Driver Cnt Fuel Cell Usable H2 Fuel Cell (HEV-EV C# Drive Motor Ger Motor Ger Rated Motor Fuel Meter

replaced head, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh  
replaced head, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh

replaced head, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh

replaced head, engine speed 930 to 3500 RPM, vehicle speed greater than 25 kmh

GENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM

1 Other

3 PHASE CI

34

W01 Desc	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell V	Off Board	Camless V	Oil Viscosi	Eng Mgmt	Eng Mgmt	Trans in FE
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	CRDI	Common FN				N	5W40 N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Manual(M
	GDI	Spark IgnitN				N	5W40 N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AV-Si
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Manual(M
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AV-Si
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Manual(M
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AV-Si
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(S8)
	CRDI	Common F				N	5W30 VW N	No		Auto(S8)
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Manual(M
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W40 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(AM-S
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(AM-S
	GDI	Spark IgnitN				N	5W40 N	No		Auto(AM-S
	GDI	Spark IgnitN				N	5W40 N	No		Auto(AM-S
	GDI	Spark IgnitN			N	N	5W40 VW N	No		Manual(M
	MFI	MultipointN				N	5W30 VW N	No		Auto(S6)
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(S8)
	MFI	MultipointN				N	5W30 VW N	No		Auto(S6)
	GDI	Spark Ignit				N	5W30 VW N	No		Auto(S8)
	MFI	MultipointN				N	5W30 VW N	No		Auto(S6)
	MFI	MultipointN				N	5W30 VW N	No		Auto(S6)
	MFI	Multipoint				N	10W60 VVN	No		Auto(S7)
	GDI	Spark Ignit				N	10W60 VVN	No		Auto(AM-S
	GDI	Spark Ignit				N	10W60 VVN	No		Manual(M6
	GDI	Spark Ignit				N	10W60 VVN	No		Auto(AM-S
	GDI	Spark Ignit				N	10W60 VVN	No		Manual(M6

GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
GDI	Spark Ignit		N	5W40 VW N	No	Manual(M
GDI	Spark Ignit		N	5W-40 VWN	No	Auto(S6)
GDI	Spark Ignit		N	5W-40 VWN	No	Auto(S6)
GDI	Spark Ignit		N	5W40 / VVN	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
GDI	Spark Ignit N		N	5W40 N	No	Manual(M
GDI	Spark Ignit N		N	5W40 N	No	Auto(AM-S
GDI	Spark Ignit N		N	5W40 N	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Auto(AM-S
MFI	Multipoint		N	5W40 VW N	No	Auto(S6)
MFI	Multipoint		N	5W40 VW N	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Manual(M
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
CRDI	Common FN		N	5W40 N	No	Auto(AM-S
CRDI	Common FN		N	5W40 N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
CRDI	Common F		N	5W40 VW N	No	Auto(AM-S
CRDI	Common F		N	5W40 VW N	No	Manual(M
MFI	Multipoint		N	10W40 / VN	No	Auto(S6)
MFI	Multipoint		N	10W40 / VN	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Auto(AM-S
GDI	Spark Ignit		N	5W40 VW N	No	Auto(S6)
GDI	Spark Ignit		N	5W40 VW N	No	Manual(M
GDI	Spark Ignit		N	5W40 VW N	No	Auto(S6)
CRDI	Common F		N	5W30 VW N	No	Auto(S8)
GDI	Spark Ignit		N	5W40 VW N	No	Auto(S8)
GDI	Spark Ignit N	N	N	5W40 VW N	No	Auto(S8)

MFR Data will be entered after May 18, 2011

Hand as Mode type	Charge De	Charge By	Charge Su	Charge Su	EPA Calcul	EPA Calcul	MFR Calcul	EPA Calcul
Auto(AM-S							30.8	
Auto(AM-S							46.2	
Manual(M€A3 frt man							30.4	
Auto(AM-SA3 quattro							30.9	
Auto(AV-Si							35.2	
Auto(S8)							30.8	
Manual(M€							33.2	
Auto(AV-Si							35.2	
Auto(S8)							30.8	
Auto(S8)							30.8	
Manual(M							33.2	
Auto(AV-SAudi A6 CV							36.9	
Auto(S8)							30.8	
Auto(S8) Audi A6 qu							28.1	
Auto(S8)							27.5	
Auto(S8)							27.5	
Auto(S8)							27.5	
Auto(S8)							19.3	
Auto(S8)							29.5	
Auto(S8) Audi Q7							22.9	
Auto(S8)							28.1	
Auto(AM-S							23	
Auto(AM-S							22.6	
Auto(AM-S							26.9	
Manual(M€							23.5	
Auto(AM-S							26.9	
Manual(M							23.5	
Auto(AM-S							26.4	
Auto(AM-S							25.5	
Auto(AM-S							25.5	
Auto(AM-S TT Coupe c							33.3	
Auto(AM-S TT Coupe c							33.3	
Manual(M€TTRS							25.6	
Auto(S6)							17.2	
Auto(S8)							23.6	
Auto(S6)							17.4	
Auto(S8)							21.8	
Auto(S6)							17.2	
Auto(S6)							17.4	
Auto(S7)							12.6	
Auto(AM-S							19.4	
Manual(M€Gallardo C							17.4	
Auto(AM-S							19.3	
Manual(M€Gallardo S							16.1	

Auto(AM-S	31.8
Manual(M	43.4
Auto(S6)	31.6
Manual(M	31.9
Auto(AM-S	31.5
Manual(M€	43.4
Auto(S6)	30.3
Auto(AM-S	32.3
Manual(M CC M6	31.8
Auto(S6)	25.8
Auto(S6)	24.8
Auto(AM-S	32.4
Auto(AM-S	46.2
Manual(M Jetta Sport	46
Auto(S6)	33.1
Manual(M	32.2
Manual(M	28.5
Auto(AM-S	34.8
Manual(M	31.2
Auto(AM-S	35
Auto(AM-S	46.2
Auto(S6) Jetta Base	32.9
Manual(M	34.7
Manual(M	32.6
Manual(M Jetta Sport	46
Auto(S6)	33.1
Manual(M€	32.2
Auto(AM-S	44.2
Manual(M€ Jetta Sport	46
Auto(S6)	33.1
Manual(M€	32.2
Auto(AM-S	44.6
Manual(M€	46.4
Auto(S6)	31.9
Manual(M€	31.7
Auto(AM-S	28.5
Auto(S6) Tiguan froi	29.9
Manual(M€	26.4
Auto(S6)	29.6
Auto(S8)	23.3
Auto(S8)	25
Auto(S8) Touareg H	28.2

MPG	City	Highway	City CO2	Highway CO2	Comb CO2	CO2-Vol	In CO2	City CO2
6	6		400	432	319	381		333
9	8	3100		336	243	294		259.8
6	6		400	442	296	376		350
6	6		400	442	316	374		325
7	7	600		373	304	342		293.8
6	6		400	437	297	374		345.7
7	7	600		397	276	343		320.4
7	7	600		373	304	342		293.8
6	6		400	437	297	374		345.7
6	6		400	437	297	374		345.7
7	7	600		397	276	343		320.4
7	7	1350		360	272	320		282
6	6		400	437	297	374		345.7
5	5		1400	482	326	412		383.5
5	5		1900	498	321	418		395.5
5	5		1900	498	321	418		395.5
5	5		1900	498	321	418		395.5
3	3		6150	675	430	565		559
6	6		900	450	325	394		352
4	4		4150	573	411	500		461
5	4	1400		541	369	464		446
4	4		4150	562	379	480		466
4	4		4150	5625	398	486		463
5	5		1900	488	321	413		369
5	5		1900	441	355	402		443
5	5		1900	488	321	413		369
5	5		1900	441	355	402		443
5	5		1900	500	341	429		434
5	5		2650	530	330	440		427.3
5	5		2650	530	330	440		427.3
7	7	600		395	284	345		312
7	7	600		395	284	345		312
5	5		2650	499	350	432		419
2	2		8650	787	474	646		649
4	4		4150	590	364	488		466
2	2		8650	768	469	634		639
4	4		5150	638	370	517		510
2	2		8650	787	474	646		649
2	2		8650	768	469	634		639
1	1		16900	1050	599	847		885
3	3		6150	657	447	563		552
3	3		7400	734	511	633		635
3	3		6150	660	446	564		556
2	2		8650	768	452	625		681

6	6	100		401	291	351	334.3
9	8	2600		362	249	311	282
6	6		400	421	310	371	332
9	8	2600		362	249	311	282
6	6	100		403	283	349	327.2
6	6	100		405	257	338	321
9	8	3100		336	243	294	259.8
9	8		3100	338	230	289	261.7
5	5		1400	459	331	401	372
7	7	1100		379	271	331	295
7	7	1100		372	280	331	300.9
9	8	3100		336	243	294	259.8
7	7	850		381	299	344	315
8	8	2100		361	262	316	307
7	7	600		403	272	344	333.9
9	8		3100	338	230	289	261.7
8	7	2850		348	256	307	270
9	8		3100	338	230	289	261.7
9	8	3100		331	240	290	268
9	8	3350		330	239	289	266
6	6	850		401	289	350	328.2
7	7	1350		430	273	359	339.6
6	6		900	449	319	391	372
6	6		900	435	350	397	344
5	5		1900	509	346	436	407
6	6		900	435	343	394	343.7
6	5		900	517	351	443	422
4	4		3400	520	391	462	416
5	5		1900	447	372	413	354



City PHEV Total City PHEV Hwy PHEV				
232	287.6	432	319	381
171.2	219.9	336	243	294
220	291.5	442	296	376
239	286.3	442	316	374
199.8	251.6	373.3	303.6	324.4
218.7	288.6	436.9	296.8	373.9
202.1	267.2	397.1	276.4	342.8
199.8	251.6	373.3	303.6	324.4
218.7	288.6	436.9	296.8	373.9
218.7	288.6	436.9	296.8	373.9
202.1	267.2	397.1	276.4	342.8
189	240	360	272	320
218.7	288.6	436.9	296.8	373.9
233	315.8	481.7	326	411.6
238.7	323.9	498	320.9	418.4
238.7	323.9	498	320.9	418.4
238.7	323.9	498	320.9	418.4
346	463.2	675	430	564.8
238	300.7	444	333	394
296	387	573	412	501
260	362.3	541	369	464
296	389.5	562	379	480
307	392.8	558	398	486
248	329.4	488	321	412.9
266	242.9	440.6	355	402.1
248	329.4	488	321	412.9
266	242.9	440.6	355	402.1
260	355.7	500	341	428.5
251.6	348.3	530.4	329.7	439.5
251.6	348.3	530.4	329.7	439.5
210	266	395	284	344.6
210	266	395	284	344.6
259	347	498.9	350.4	432.1
361	519.4	787	474	646
265	375.6	590	364	488.3
359	513	768	469	634
288	410.1	638	370	517.4
361	519.4	787	474	646
359	513	768	469	634
495	709.5	1050.2	598.8	847.1
349	460.7	657	447	563
370	515.8	734	511	633
348	462.4	660	446	564
391	550.5	768	452	625

211.2	278.9	401	290.6	351.3
175.7	234.2	361.9	248.8	311

220.9	282	421	310	371
175.7	234.2	361.9	248.8	311

207.7	273.4	402.8	282.7	348.8
-------	-------	-------	-------	-------

213	272.4	405	257	338
171.2	219.9	336	243	294
170	220.5	337.9	229.6	289.2

240	312.6	459	331	401
203	254	379	271	331

198.4	254.8	372	280.4	330.6
171.2	219.9	336	243	294
214	269.6	381.3	298.8	344.2
192	255.3	360.5	262	316.2
197.2	272.4	403.3	271.8	344.3
170	220.5	337.9	229.6	289.2

181	230	348	256	307
170	220.5	337.9	229.6	289.2

179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.3
206.8	279.9	429.9	273.1	359.3
238	311.7	449	319	391
251	302	435	350	397
248	335.5	509	346	436
246.1	299.8	435	343	394
248	343.7	517	351	443
281	355.3	520.1	390.6	461.8
267	314.9	447	372	413

City	MPG	City Miles	Distance	Comb Vol	Higher	Final Label	EPA calcul	Error? (EP	EPA_FUEL	EPA_GHG	MFR	EPA
N				4.2		4.2	4.2	0				
N				2.9		2.9	2.9	0				
N				4.2		4.2	4.2	0				
N				4.2		4.2	4.2	0				
N				3.8		3.8	3.8	0				
N				4.2		4.2	4.2	0				
N				3.8		3.8	3.8	0				
N				3.8		3.8	3.8	0				
N				4.2		4.2	4.2	0				
N				4.2		4.2	4.2	0				
N				3.8		3.8	3.8	0				
N				3.6		3.6	3.6	0				
N				4.2		4.2	4.2	0				
N				4.5		4.5	4.5	0				
N				4.8		4.8	4.8	0				
N				4.8		4.8	4.8	0				
N				4.8		4.8	4.8	0				
N				6.3		6.3	6.3	0				
N				4.3		4.3	4.3	0				
N				5.6		5.6	5.6	0				
N				4.5		4.5	4.5	0				
N				5.6		5.6	5.6	0				
N				5.6		5.6	5.6	0				
N				4.8		4.8	4.8	0				
N				5		5	5	0				
N				4.8		4.8	4.8	0				
N				5		5	5	0				
N				4.8		4.8	4.8	0				
N				5		5	5	0				
N				5		5	5	0				
N				3.8		3.8	3.8	0				
N				3.8		3.8	3.8	0				
N				5		5	5	0				
N				7.1		7.1	7.1	0				
N				5.6		5.6	5.6	0				
N				7.1		7.1	7.1	0				
N				5.9		5.9	5.9	0				
N				7.1		7.1	7.1	0				
N				7.1		7.1	7.1	0				
N				10		10	10	0				
N				6.3		6.3	6.3	0				
N				6.7		6.7	6.7	0				
N				6.3		6.3	6.3	0				
N				7.1		7.1	7.1	0				

N	4	4	4	0
N	3.1	3.1	3.1	0
			4	
			4	
N	4.2	4.2	4.2	0
N	3.1	3.1	3.1	0
			4.3	
N	4	4	4	0
			4	
			4.8	
			5	
N	4	4	4	0
N	2.9	2.9	2.9	0
N	2.9	2.9	2.9	0
			3.8	
			3.8	
N	4.5	4.5	4.5	0
N	3.7	3.7	3.7	0
			4	
N	3.7	3.7	3.7	0
N	2.9	2.9	2.9	0
N	4	4	4	0
N	3.6	3.6	3.6	0
N	3.8	3.8	3.8	0
N	2.9	2.9	2.9	0
			3.8	
			3.8	
N	3	3	3	0
N	2.9	2.9	2.9	0
			3.8	
			3.8	
N	2.9	2.9	2.9	0
N	2.9	2.9	2.9	0
N	4	4	4	0
N	3.8	3.8	3.8	0
N	4.3	4.3	4.3	0
N	4.3	4.3	4.3	0
N	4.8	4.8	4.8	0
N	4.3	4.3	4.3	0
N	4.3	4.3	4.3	0
N	5.3	5.3	5.3	0
N	4.8	4.8	4.8	0





EPAMUNITEP\_A\_Q2NRIEPA\_ADJ\_EPA\_PHEVLabel Subn

Mr. Richard E Thomas Jr.

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Mr. Richard E Thomas Jr.

[illegible]



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 7/5/2012 11:38:10 AM  
**Subject:** FW: VW Group - Supplemental Information (HLP-2708)

Hello Jim,

Just a follow up on the test date for the Jetta Hybrid.

I worked with the VERIFY help desk to be sure that the supplemental information is in the system. Please let me know when we get a test date.

Thanks,  
Mike

-----Original Message-----

From: [REDACTED] **Ex. 6** [REDACTED]@csc.com] On Behalf Of Verify Help Desk  
Sent: Tuesday, July 03, 2012 4:31 PM  
To: Giles, Michael (EEO)  
Subject: RE: VW Group - Supplemental Information (HLP-2708)

Hello Mr. Giles,

I've verified that your Correction is in the system. Please verify with your EPA Cert Rep if the EPA lab has received notification about this submission.

**Ex. 6**

Verify Help Desk  
Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Giles, Michael  
(EEO)"  
<michael.giles@vw.com> To  
Verify Help Desk@CSC  
cc  
07/03/2012 03:55  
PM Subject  
RE: VW Group - Supplemental  
Information (HLP-2708)

Thanks, I have re-submitted the information.

The new transaction ID is:

Transaction Id: \_2a619ae9-752b-49ec-999b-1cd3204e1e87

Please let me know if it gets through ok.

-----Original Message-----

From: [REDACTED] Ex. 6 [REDACTED]@csc.com] On Behalf Of Verify Help Desk

Sent: Tuesday, July 03, 2012 3:41 PM

To: Giles, Michael (EEO)

Subject: Re: VW Group - Supplemental Information (HLP-2708)

Hello Mr. Giles,

We have verified that your supplemental information submitted on June 25 is in the system and your submission should have prompted notification to the lab. Please make your supplemental information submission again as a Correction and this should send the notification to the lab.

**Ex. 6**

Verify Help Desk

Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

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Verify Help Desk

Sent by: [REDACTED] Ex. 6 [REDACTED]

Ex. 6

To

"Giles, Michael (EEO)"

<michael.giles@vw.com>

07/03/2012 12:09

cc

PM  
Subject  
Re: VW Group - Supplemental  
Information (HLP-2708) (Document  
link: Verify Help Desk)

Hello Mr. Giles,

Verify help desk ticket HLP-2708 was opened for your inquiry. We will look into this and get back to you shortly.

**Ex. 6**

Verify Help Desk  
Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Giles, Michael  
(EEO)"  
<michael.giles@vw.com> To  
Verify Help Desk@CSC  
cc  
07/03/2012 10:59  
AM Subject  
VW Group - Supplemental Information

Last week on June 25th, we submitted a supplemental information data set for the Jetta 1.4L Hybrid , which was

accepted (Transaction Identifier:

\_510f17c4-79a9-447c-8bd2-888ebb5505c5 ).

Normally we would then receive a test date from the lab. After inquiry, our certification rep at EPA has informed us that the lab did not receive notification about this submission.

Can you check this and let me know if there is something else I need to do to get a test date?

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** Ex. 7 [redacted]vw.com]; im  
Snyder/AA/USEPA/US@EPA; Roberts French/AA/USEPA/US@EPA; Ex. 7 [redacted]  
Ex. 7 [redacted]vw.com]; Roberts French/AA/USEPA/US@EPA; Ex. 7 [redacted]  
Ex. 7 [redacted]@vw.com]; Ex. 7 [redacted]@vw.com]  
**From:** Ex. 7 [redacted]  
**Sent:** Thur 7/5/2012 12:27:33 PM  
**Subject:** RE: 2013 FE Guide Errors in Verify; Many errors when calculating adjusted combined  
fuel consumption(gal/100 miles); Request to update any 2013 Labels submitted before May 11,  
2012  
[www.fueleconomy.gov](http://www.fueleconomy.gov)

Hi Dave;

Hope you had a nice fourth. I have updated all the 2013 labels that were processed before the May 11th  
Verify release 10 date. There were thirteen Volkswagen labels. I have also corrected the typo on the city  
CO2 value on label index # 52. If you want to run your audit again, and send me the results I will check it  
out.

Best regards,

Richard

**From:** David Good [mailto:Good.David@epamail.epa.gov]  
**Sent:** Tuesday, July 03, 2012 12:11 PM  
**To:** Ex. 7 [redacted]  
**Cc:** Ex. 7 [redacted] Jim Snyder; Roberts French  
**Subject:** re: 2013 FE Guide Errors in Verify; Many errors when calculating adjusted combined fuel  
consumption(gal/100 miles); Request to update any 2013 Labels submitted before May 11, 2012

Richard,

As we discussed over the phone yesterday---you were one of the few manufacturers who calculated fuel  
consumption correctly---good Job!

Dave

1. Errors in Verify: Attached is a spreadsheet with the 2013 FE Label errors in Verify as of June 29, 2012.  
The spreadsheet contains all the 2013 FE Label data in Verify as of June 29, 2012 including some of the  
new Release 10 fields (columns 141-184). Color coding is explained in the heading for each column,  
except for the various shades of green. Labels with errors are highlighted in green fill in the first few  
columns or almost all columns---with the field where the error occurred highlighted in yellow fill. [Normal  
Green (not pea green) means the error occurred in the Combined Adjusted Fuel Consumption (gal/100  
miles) field.]

When you get a chance, please correct the errors--so I can forward the corrected data to DOE for posting on the web on the 1st and 15th of each month.

2. Errors in Combined Adjusted Fuel Consumption: I'm finding a lot of errors in the new field "Adjusted Combined Model Type Fuel Consumption" (column 165 of the attached spreadsheet). EPA calculated fuel consumption is in column 166. Some manufacturers are entering fuel economy values (mpg) values instead of fuel consumption (gallons per 100 miles). Some manufacturers are incorrectly calculating fuel consumption using the (incorrect) unrounded adjusted combined mpg value instead of the correct rounded adjusted combined mpg value (as prominently displayed on 2013 labels (window stickers)---as explained in more detail in Item 3, below.

When you get a chance, please correct the fuel consumption errors in Verify. [Note that I'm not currently sending fuel consumption values to DOE for posting on the web, so I don't need the fuel consumption errors corrected immediately. Please correct them as soon as possible, but if you need 2-3 weeks to correct them, that's OK with me.]

If there are errors in the fuel consumption value listed on the actual labels (window stickers) of your vehicles, please correct the labels as soon as practicable. Call or email me if you have questions about the fuel consumption values shown on the actual labels (window stickers) of your vehicles.

3. Mistake in the EPA Regulations for Calculating Fuel Consumption (600.311-12(c): For conventional vehicles (not EVs or PHEVs), there is a mistake in the current regulations at 600.311-12(c) which EPA proposed to correct in the 2017 greenhouse gas proposal (page 76FR 75392, Dec 1, 2011).

The current (incorrect) regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The unrounded value for combined fuel economy from 600.210-12(c)."

The (correct) proposed regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The value for combined fuel economy from 600.210-12(c) rounded to the nearest whole mpg." Please use the voluntarily lowered combined adjusted MPG value, if applicable.

We are making this change for several reasons, e.g. so that customers will be able to accurately calculate the fuel consumption of their vehicle from the information displayed on the label; so that two vehicles with the same combined fuel economy mpg values won't have different fuel consumption values displayed on the label, etc. One benefit to manufacturers and EPA is that this correction will result in fewer questions from consumers about how the fuel consumption values are calculated.

4. Request to update any 2013 FE Labels submitted to Verify before May 11, 2012: EPA and DOE are in the process of updating the information displayed at [www.fueleconomy.gov](http://www.fueleconomy.gov) to show the same type of information which is displayed on the 2013 window stickers, e.g. Fuel Economy (1-10) rating, Greenhouse Gas (1-10) Rating, Smog (1-10) rating, adjusted combined fuel consumption (values, adjusted combined CO2 (grams/mile) values, amount saved (or spent) over 5 years, battery charging time for EVs & PHEVs, etc. We anticipate that the website will be updated within the next couple of months. For this reason, we are requesting that manufacturers update any labels which were entered into EPA's Verify data base prior to May 11, 2012 (Verify Release 9 labels which don't contain this information).

If possible, please try to update those labels before August 6, 2012. Please call or email me if you need more time to update your labels.

Thanks

(See attached file: VW\_Group\_2013 FEGuide1-all rel dates-no-sales-06-29-2012 PLUS new Rel10 fields.xlsx)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Dorer, Frank, Dr. (EASZ/3)" [frank.dorer@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Fri 7/6/2012 4:10:09 PM  
**Subject:** Report - MPI/FSI System  
EPA Meeting Report May 30, 2012 - MPI FSI System.pdf

Hello Jim:

Attached please find a copy of the report from our conference call concerning the MPI/FSI Injection System. I realize that you were the sole EPA participant, but you may wish to distribute the report as you see fit.

Please let me know if you have any additional questions or comments.

Best regards,

Len

---

Leonard W. Kata

Manager, Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** "Harris, Dale (EEO)" [Dale.Harris@vw.com]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Fri 7/6/2012 11:49:37 PM  
**Subject:** 2013 VW greenhouse gas PreMY report questions & potential errors - Revised 6/18/2012 - [more EPA followup questions]

Dale,

Thanks for your response to my questions about the VW 2013 greenhouse gas Pre-Model Year Report. I reviewed your revised templates and still have a few follow-up questions. Here are my comments & questions:

1. 2013 Car fleet average template: The standard is listed as 258 gpm, which doesn't agree with the standard shown on the standards calculator (257 gpm). The AB&T template shows 258gpm.

Please advise.

2. 2013 Truck fleet average template: Looks OK to me & agrees with the data shown on the AB&T template.

3. 2014 Car fleet average template: The total A/C credits (290,345 Mg) doesn't equal the sum of the A/C leakage credits (252,367) and the A/C efficiency credits (328,322). It appears that you have somehow altered the calculations in the EPA fleet average template. As a result, the Total Fleet Average CREE (credit/debit) looks to be in error (-10,762 debits shown instead of 279,835 credits which I calculated).

The AB&T template shows 252,367 A/C leakage credits and 328,322 A/C efficiency credits. The AB&T template shows the Total Fleet Average CREE value of 279,583. It looks like you may have entered unrounded values for the standards (or compliance level---but I can't tell since you included a pdf copy, only. [I'm not too concerned about these rounding differences----especially if you want to use unrounded (more accurate) values----however the final GHG report data which you submit to EPA's Verify data base will be rounded to the nearest whole gpm value.] ).

Please advise.

4. 2014 Truck fleet average template: Looks OK to me but doesn't quite agree with the AB&T template. ).

The fleet average template shows -121,911 debits for the fleet average CREE (w/o A/C credits) while the AB&T template shows -121,570 debits. The fleet average template shows a Total Fleet Average CREE value of 10,223 Mg credits (including A/C credits) while the AB&T template shows 10,564 credits. Again this looks like a minor rounding error to me.

Please advise.

5. 2015 Car fleet average template: Similar to item 3 above, the total A/C credits (303,571 Mg) doesn't



equal the sum of the A/C leakage credits (260,549) and the A/C efficiency credits (346,593). It appears that you have somehow altered the calculations in the EPA fleet average template. As a result, the Total Fleet Average CREE (credit/debit) looks to be in error (-358,487 debits shown instead of -54,915 debits which I calculated--- and which is shown on the AB&T template).

Please advise.

6. 2016 Truck fleet average template: The standard is listed as 291 gpm, which doesn't agree with the standard shown on the standards calculator (294 gpm). The AB&T template shows a standard of 291gpm. Also, similar to item 3 above, the total A/C credits (63,616 Mg) doesn't equal the sum of the A/C leakage credits (50,339) and the A/C efficiency credits (76,893). It appears that you have somehow altered the calculations in the EPA fleet average template. As a result, the Total Fleet Average CREE (credit/debit) looks to be in error -261,964 debits shown instead of -149,511 debits which I calculated.

The AB&T template shows a 291 gpm standard which doesn't agree with the 294 value shown on the standards calculator. The AB&T template shows -325,580 debits for the fleet average CREE (w/o A/C credits) while I calculate -276,473 debits using a standard of 294 gpm. The AB&T template shows a Total Fleet Average CREE value of -198,348 Mg debits (including A/C credits) while I calculate -149,511 Mg debits).

Please advise.

7. AB&T Template: Thanks for entering the 2013, 2014 & 2015 summary information into one AB&T spreadsheet---- unfortunately you deleted the 2009-2011 credit/debit summary. If possible, please add the 2009-2011 credit/debits back into the AB&T spreadsheet. Also if possible, please use the values from your 2009-2011 Early Credit report which you sent to Rob French---with a note that that's where they came from and whether they are preliminary values or final values which you and Rob have agreed upon. [Both VW and EPA will need to keep good records in this spreadsheet as it gets updated each year---because it will be a while before EPA will begin tracking this information in Verify. [If you want to send me the AB&T spreadsheet (in Excel—not a pdf), I'll be glad to enter VW's 2009-2011 car & truck credits which Rob French gave me. Then I'll send it back to you for final editing.]

Please advise.

8. Potential Merger of VW & Porsche: Thanks for the information about the status of the VW's acquisition of Porsche. My supervisor, Linc Wehrly, said he heard in the news yesterday that VW has plans to buy controlling interest in Porsche which is scheduled to become effective on August 1, 2012 or so. My reading of the GHG & CAFE regulations is that both defer to NHTSA Successor & Predecessor regulations. For example the provisions of 49 CFR 534.5 (b) read "A manufacturer is considered to be within a control relationship for an entire model year if and only if it is within that relationship on September 30 of the calendar year in which the model year ends." My understanding is that the basis for a "control relationship" can be 1) control of the design, calibration, etc., of the vehicle(s) or 2) corporate ownership control (e.g. owning more than 50% of a company). Call me at 734-214-4450 if you would like to discuss this a little more.

It might be worthwhile to have a meeting on all the impacts of this, including how to handle EPA certification, FE labeling, IUVP, CAFE, Greenhouse gas reporting, certificate language, etc after you and Porsche have had time to work out a plan---or at least you should document your plans in a letter to EPA.

Thanks

Dave

From: "Harris, Dale (EEO)" <Dale.Harris@vw.com>

To: David Good/AA/USEPA/US@EPA  
Cc: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>, "Schmidt, Oliver (EEO)" <Oliver.Schmidt@vw.com>  
Date: 06/18/2012 10:07 AM  
Subject: RE: 2013 light-duty Greenhouse gas - 2013 PreMY report questions & potential errors - Revised 6/18/2012

Dave

Attached are updated documents that address the issues identified within you most recent email. In addition I have included responses to the each of the identified issues in red below. Furthermore a statement has been included that address the uncertainty associated with Porsche. Please let me know if there are any additional questions. Thanks!

1. Potential error in your fleet average calculations: Using the projected CREE fleet average estimates and CREE standards listed in your (attached) 2013 Pre-MY report spreadsheet, I come up with slightly different results for the total "Model Year Credits (Debits)" fields for car and trucks for 2012-2015 model years. For example, my calculations for 2013-2015 model year result in the following credit (Megagram) values:

Category	D.Good CREE Calcs	VW CREE values	Comments
2013 Pass Car	(730,335)	(778,903)	
2013 Light Truck	87,527	87,527	
agrees with VW			
2014 Pass Car	(79,674)	(91,543)	
2014 Light Truck	(16,902)	(17,244)	
2015 Pass Car	(424,806)	(395,074)	
2015 Light Truck	(272,380)	(275,812)	

My calculations, for example, for 2013 cars are  $[(258 - 269)(550,837)(195,264)/1,000,000] - 404,242 \text{ (A/C credits)} = 778,903$  credits. It looks like your calculations are not rounding the CREE standards and fleet average CREE values to the nearest whole gram/mile, as required by EPA regulations.

Please advise.

Attached are updated documents where CREE Fleet Average estimates have been corrected by using the appropriate rounding technique.

**Ex. 4 - CBI**

Please advise.

EPA Calculator documents have been updated to correct errors in projected planning volumes. Planning volumes are now aligned throughout the report MY 2013 – 2015.

3. Bugatti: Bugati models appear to be missing in your 2013-2015 templates.

Please advise  
Bugatti planning volumes not available.

4. Three AB&T Spreadsheets: Your report contains three AB&T spreadsheets. None of them include projections for 2014 or 2015 model year credits. Please combine the three spreadsheets into one AB&T spreadsheet which includes a listing for 2014 and 2015 credits.

Please advise.  
AB&T spreadsheet has been updated with MY 2013 – 2015 appearing on 1 spreadsheet as requested.

5. A/C Leakage and Efficiency Credits: Your 2013 Pre-MY report doesn't contain any details of how the A/C credits were generated for each model. Please provide a little more detail about how the A/C leakage and A/C efficiency credits will be generated for 2012 and 2013 model year vehicles, and (if possible) 2014 and 2015 model year vehicles---similar to the level of detail provided in the EPA templates available at <http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>.

Please advise.  
Support documentation has been provided that demonstrates how credits were generated for each model.

6. Possible Merger of VW and Porsche: Over the past year, there have been some articles in the press about a potential merger of VW & Porsche. If possible, please provide a brief summary of the status of that possible merger and any potential effects on VW's 2013 GHG compliance plans.

"On September 8, 2011, Volkswagen AG announced that the planned merger with Porsche Automobile Holding SE (Porsche SE) cannot be implemented within the time frame laid down in the Comprehensive Agreement. The decision was reached by the Board of Management of Volkswagen AG following discussions with Porsche SE. Nevertheless, all parties remain committed to the goal of creating an integrated automotive group with Porsche and are convinced that they will succeed in doing so.

The existing legal hurdles, and particularly those resulting from the ongoing proceedings and actions against Porsche SE in Germany and the USA due to alleged market manipulation, made it impossible from Volkswagen's perspective to quantify the economic risks and hence to arrive at a valuation for Porsche SE that could be used to determine the exchange ratio.

Over the past months, Volkswagen AG and Porsche SE have conducted in-depth examinations of whether there are other possibilities, in addition to the put/call options contained in the Comprehensive Agreement, that can be implemented by all parties involved in order to achieve the goal of creating the integrated automotive group with Porsche [AG, the operating business,] on economically feasible terms [earlier than 2014]. These examinations are still ongoing."

Regards,  
Dale Harris  
Certification Specialist

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office (EEO)  
3800 Hamlin  
AuburnHills Michigan 48326  
United States of America

P: +1 248 754-4218  
E: Dale.Harris@vw.com

[attachment "winmail.dat" deleted by David Good/AA/USEPA/US] [attachment "message\_body.rtf" deleted by David Good/AA/USEPA/US] [attachment "2013 Pre MY Report.pdf" deleted by David Good/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 7/16/2012 11:49:25 AM  
**Subject:** VW Group - Decision Information Submitted for Audi Q5 Hybrid VID DHUB-Q5H

Hello Jim,

We have submitted a Decision Information for the 2013 Audi Q5 Hybrid, VID DHUB-Q5H. This is a new test vehicle that replaces the 2012 model previously tested at EPA. No significant changes have been made to the vehicle design. Manufacturer confirmatory tests are required for FTP and HWY due to high fuel economy for the ETW.

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** [REDACTED] Ex. 7 [REDACTED]@vw.com]  
**From:** [REDACTED] Ex. 7  
**Sent:** Wed 7/18/2012 4:16:08 PM  
**Subject:** Bentley Flexible Fueled Models and Driving Range  
[winmail.dat](#)

Hi Dave;

As we discussed on the phone, the miles on a tank values were missing on the fuel economy guide web site for the four 6.0L Bentley flexible fueled (E85) Continental models. They are the Continental GT, Continental GTC, Continental Flying Spur and the Continental Supersports Convertible. The fuel tank volume for these models is 23.8 US gallons. I understand from our discussion that the miles on a tank is not the same value we calculate per the requirements and that must appear on the fuel economy label for each of the fuels (gasoline and E85) on a flexible fueled model.

I noticed that many of the Audi gasoline and Diesel fueled models have a value for the "miles on a tank", however none of the Volkswagen models have this listed. If possible, we would like to see the "miles on a tank" on these high volume, fuel efficient Volkswagen models as well.

Thanks,  
Richard

Hi Dave;

As we discussed on the phone, the miles on a tank values were missing on the fuel economy guide web site for the four 6.0L Bentley flexible fueled (E85) Continental models. They are the Continental GT, Continental GTC, Continental Flying Spur and the Continental Supersports Convertible. The fuel tank volume for these models is 23.8 US gallons. I understand from our discussion that the miles on a tank is not the same value we calculate per the requirements and that must appear on the fuel economy label for each of the fuels (gasoline and E85) on a flexible fueled model.

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Thanks,

Richard

**To:** hopsonjl@ornl.gov[]  
**Cc:** gibsonrc@ornl.gov;richard.thomas@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; ichard.thomas@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Wed 7/18/2012 9:45:44 PM  
**Subject:** Fw: Bentley Flexible Fueled Models and Driving Range

Janet,

VW was wondering about the "miles on a tankful" information on the website.

Please advise---when you get a chance, especially about the VW models.

I'm thinking that very few Bentley customers are interested in the fuel economy (or miles on a tankful)--- but the press use the site for background information (which eventually gets out to the public). It's probably a different story for VW customers.

Dave

----- Forwarded by David Good/AA/USEPA/US on 07/18/2012 05:38 PM -----

**From:** "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
**To:** David Good/AA/USEPA/US@EPA  
**Cc:** "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
**Date:** 07/18/2012 12:16 PM  
**Subject:** Bentley Flexible Fueled Models and Driving Range

Hi Dave;

As we discussed on the phone, the miles on a tank values were missing on the fuel economy guide web site for the four 6.0L Bentley flexible fueled (E85) Continental models. They are the Continental GT, Continental GTC, Continental Flying Spur and the Continental Supersports Convertible. The fuel tank volume for these models is 23.8 US gallons. I understand from our discussion that the miles on a tank is not the same value we calculate per the requirements and that must appear on the fuel economy label for each of the fuels (gasoline and E85) on a flexible fueled model.

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Thanks,  
Richard  
[attachment "winmail.dat" deleted by David Good/AA/USEPA/US]



**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** "Gibson, Robert C." [gibsonrc@ornl.gov]; richard.thomas@vw.com"  
[richard.thomas@vw.com]; oberts French/AA/USEPA/US@EPA;"Li, Jia" [lij1@ornl.gov];  
Li, Jia" [lij1@ornl.gov]  
**From:** "Hopson, Janet L."  
**Sent:** Thur 7/19/2012 11:57:56 AM  
**Subject:** RE: Bentley Flexible Fueled Models and Driving Range  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)  
[Leonard.Kata@vw.com](mailto:Leonard.Kata@vw.com)

Dave, Richard:

As you know the tank size is not from the EPA dataset, but something we add here at ORNL. Generally we use a dataset provided by Edmunds. If we don't find it in the Edmunds data we look it up on the manufacture's Web site. Since that is a manual process it can take a while for us to gather the information for each new model year. We're always happy to take data straight from the manufacturer so will use the value provided by Richard below for the Bentleys. We'd also be happy to add data for the VWs if Richard would like to provide it.

As to how we calculate miles on a tank... We have always calculated the miles on a tank for gasoline, diesel, E85, etc. by assuming you will refuel when there is 10% of the fuel left in the tank so our value has never matched the official EPA range for alternative fuel vehicles. I think this is on the agenda for next week's call.

Thanks,

Janet

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Wednesday, July 18, 2012 5:46 PM  
To: Hopson, Janet L.  
Cc: Gibson, Robert C.; richard.thomas@vw.com; Roberts French  
Subject: Fw: Bentley Flexible Fueled Models and Driving Range

Janet,

VW was wondering about the "miles on a tankful" information on the website.

Please advise---when you get a chance, especially about the VW models.

I'm thinking that very few Bentley customers are interested in the fuel economy (or miles on a tankful)---but the press use the site for background information (which eventually gets out to the public). It's probably a different story for VW customers.

Dave

----- Forwarded by David Good/AA/USEPA/US on 07/18/2012 05:38 PM -----

From: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
To: David Good/AA/USEPA/US@EPA  
Cc: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
Date: 07/18/2012 12:16 PM  
Subject: Bentley Flexible Fueled Models and Driving Range

Hi Dave;

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I noticed that many of the Audi gasoline and Diesel fueled models have a value for the "miles on a tank", however none of the Volkswagen models have this listed. If possible, we would like to see the "miles on a tank" on these high volume, fuel efficient Volkswagen models as well.

Thanks,  
Richard

[attachment "winmail.dat" deleted by David Good/AA/USEPA/US]

**To:** richard.thomas@vw.com[]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com[];  
liver.schmidt@vw.com[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 7/19/2012 9:36:12 PM  
**Subject:** re: 2013 FE Guide - Data in EPA's Verify data base as of 7/17/2012 attached;  
VW Group 2013 FE Guide-all-rel-dates-no-sales-7-17-2012.xlsx

Richard,

Thanks for making corrections and updating your 2013 labels over the past two weeks. Our macro didn't pick up any errors in the data currently in Verify.

Attached is a spreadsheet with all the 2013 FE Labels in Verify as of July 17, 2012.

Note that (as will be outlined in a forthcoming EPA guidance letter) the last day for manufacturers to make changes for the 2013 Printed Guide is August 29, 2012.

FYI----I'll include my previous email message to you from July 2, 2012 since it has a few more details about calculating fuel consumption value (gallons/100 miles).

As usual, thanks for your help.

Dave

**From:** David Good/AA/USEPA/US  
**To:** richard.thomas@vw.com  
**Cc:** oliver.schmidt@vw.com, Jim Snyder/AA/USEPA/US@EPA, Roberts French/AA/USEPA/US@EPA  
**Date:** 07/03/2012 12:10 PM  
**Subject:** re: 2013 FE Guide Errors in Verify; Many errors when calculating adjusted combined fuel consumption(gal/100 miles); Request to update any 2013 Labels submitted before May 11, 2012

Richard,

As we discussed over the phone yesterday---you were one of the few manufacturers who calculated fuel consumption correctly---good Job!

Dave

1. Errors in Verify: Attached is a spreadsheet with the 2013 FE Label errors in Verify as of June 29, 2012. The spreadsheet contains all the 2013 FE Label data in Verify as of June 29, 2012 including some of the new Release 10 fields (columns 141-184). Color coding is explained in the heading for each column, except for the various shades of green. Labels with errors are highlighted in green fill in the first few columns or almost all columns---with the field where the error occurred highlighted in yellow fill. [Normal Green (not pea green) means the error occurred in the Combined Adjusted Fuel Consumption (gal/100 miles) field.]

When you get a chance, please correct the errors--so I can forward the corrected data to DOE for posting on the web on the 1st and 15th of each month.

2. Errors in Combined Adjusted Fuel Consumption: I'm finding a lot of errors in the new field "Adjusted Combined Model Type Fuel Consumption" (column 165 of the attached spreadsheet). EPA calculated fuel consumption is in column 166. Some manufacturers are entering fuel economy values (mpg) values instead of fuel consumption (gallons per 100 miles). Some manufacturers are incorrectly calculating fuel consumption using the (incorrect) unrounded adjusted combined mpg value instead of the correct rounded adjusted combined mpg value (as prominently displayed on 2013 labels (window stickers)---as explained in more detail in Item 3, below.

When you get a chance, please correct the fuel consumption errors in Verify. [Note that I'm not currently sending fuel consumption values to DOE for posting on the web, so I don't need the fuel consumption errors corrected immediately. Please correct them as soon as possible, but if you need 2-3 weeks to correct them, that's OK with me.]

If there are errors in the fuel consumption value listed on the actual labels (window stickers) of your vehicles, please correct the labels as soon as practicable. Call or email me if you have questions about the fuel consumption values shown on the actual labels (window stickers) of your vehicles.

3. Mistake in the EPA Regulations for Calculating Fuel Consumption (600.311-12(c): For conventional vehicles (not EVs or PHEVs), there is a mistake in the current regulations at 600.311-12(c) which EPA proposed to correct in the 2017 greenhouse gas proposal (page 76FR 75392, Dec 1, 2011).

The current (incorrect) regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The unrounded value for combined fuel economy from 600.210-12(c)."

The (correct) proposed regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The value for combined fuel economy from 600.210-12(c) rounded to the nearest whole mpg." Please use the voluntarily lowered combined adjusted MPG value, if applicable.

We are making this change for several reasons, e.g. so that customers will be able to accurately calculate the fuel consumption of their vehicle from the information displayed on the label; so that two vehicles with the same combined fuel economy mpg values won't have different fuel consumption values displayed on the label, etc. One benefit to manufacturers and EPA is that this correction will result in fewer questions from consumers about how the fuel consumption values are calculated.

4. Request to update any 2013 FE Labels submitted to Verify before May 11, 2012: EPA and DOE are in the process of updating the information displayed at [www.fueleconomy.gov](http://www.fueleconomy.gov) to show the same type of information which is displayed on the 2013 window stickers, e.g. Fuel Economy (1-10) rating, Greenhouse Gas (1-10) Rating, Smog (1-10) rating, adjusted combined fuel consumption (values, adjusted combined CO2 (grams/mile) values, amount saved (or spent) over 5 years, battery charging time for EVs & PHEVs, etc. We anticipate that the website will be updated within the next couple of months. For this reason, we are requesting that manufacturers update any labels which were entered into EPA's Verify data base prior to May 11, 2012 (Verify Release 9 labels which don't contain this information).

If possible, please try to update those labels before August 6, 2012. Please call or email me if you need more time to update your labels.

Thanks

[attachment "VW\_Group\_2013 FEGuide1-all rel dates-no-sales-06-29-2012 PLUS new Rel10 fields.xlsx" deleted by David Good/AA/USEPA/US]



EPA com	VERIFY cc	Model Yr	(Mfr Name	Division	bCarline	Verify Mfr Index	(Mo Eng Displ # Cyl
		2013	Audi	Audi	A3	ADX	59 2.0 4
Diesel;		2013	Audi	Audi	A3	ADX	73 2.0 4
		2013	Audi	Audi	A3	ADX	58 2.0 4
		2013	Audi	Audi	A3 quattro	ADX	60 2.0 4
		2013	Audi	Audi	A4	ADX	35 2.0 4
		2013	Audi	Audi	A4 quattro	ADX	37 2.0 4
		2013	Audi	Audi	A4 quattro	ADX	40 2.0 4
		2013	Audi	Audi	A5 Cabriolet	ADX	36 2.0 4
		2013	Audi	Audi	A5 Cabriolet	ADX	39 2.0 4
		2013	Audi	Audi	A5 quattro	ADX	38 2.0 4
		2013	Audi	Audi	A5 quattro	ADX	41 2.0 4
		2013	Audi	Audi	A6	ADX	65 2.0 4
		2013	Audi	Audi	A6 quattro	ADX	70 2.0 4
		2013	Audi	Audi	A6 quattro	ADX	77 3.0 6
		2013	Audi	Audi	A7 quattro	ADX	76 3.0 6
Relabeled. Please include in 2013		2013	Audi	Audi	A8	ADX	128 3.0 6
Relabeled. Please include in 2013		2013	Audi	Audi	A8L	ADX	129 3.0 6
		2013	Audi	Audi	A8L	ADX	109 6.3 12
		2013	Audi	Audi	allroad quattro	ADX	134 2.0 4
		2013	Audi	Audi	Q5	ADX	91 2.0 4
		2013	Audi	Audi	Q7	ADX	61 3.0 6
Diesel;		2013	Audi	Audi	Q7	ADX	53 3.0 6
		2013	Audi	Audi	RS5	ADX	49 4.2 8
		2013	Audi	Audi	RS5 Cabriolet	ADX	52 4.2 8
		2013	Audi	Audi	S4	ADX	42 3.0 6
		2013	Audi	Audi	S4	ADX	45 3.0 6
		2013	Audi	Audi	S5	ADX	43 3.0 6
		2013	Audi	Audi	S5	ADX	46 3.0 6
		2013	Audi	Audi	S5 Cabriolet	ADX	44 3.0 6
		2013	Audi	Audi	S6	ADX	48 4.0 8
		2013	Audi	Audi	S7	ADX	47 4.0 8
		2013	Audi	Audi	TT Coupe	ADX	66 2.0 4
		2013	Audi	Audi	TT Roadster	ADX	67 2.0 4
		2013	Audi	Audi	TT RS Coup	ADX	69 2.5 5
		2013	Bentley	Bentley Motors	Continental	BEX	110 6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	108 4.0 8
		2013	Bentley	Bentley Motors	Continental	BEX	113 6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	107 4.0 8
		2013	Bentley	Bentley Motors	Continental	BEX	111 6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	112 6.0 12
Warning - if trans type is Automatic		2013	Bugatti	Bugatti	Veyron	BGT	88 8.0 16
Warning - if trans type is Automatic		2013	Lamborghini	Lamborghini	Aventador	NLX	92 6.5 12
Warning - if trans type is Automatic		2013	Lamborghini	Lamborghini	Aventador	NLX	93 6.5 12
		2013	Lamborghini	Lamborghini	Gallardo	C NLX	30 5.2 10

	2013	Lamborghini	Lamborghini	Gallardo CNLX	32	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo SiNLX	31	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel;	2013	Volkswage	Volkswage	BEETLE VWX	94	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	19	2.0	4
Diesel;	2013	Volkswage	Volkswage	BEETLE VWX	84	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	89	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	17	2.5	5
	2013	Volkswage	Volkswage	BEETLE VWX	27	2.5	5
	2013	Volkswage	Volkswage	BEETLE COVWX	20	2.0	4
Diesel;	2013	Volkswage	Volkswage	BEETLE COVWX	85	2.0	4
	2013	Volkswage	Volkswage	BEETLE COVWX	90	2.0	4
	2013	Volkswage	Volkswage	BEETLE COVWX	18	2.5	5
	2013	Volkswage	Volkswage	CC VWX	1	2.0	4
	2013	Volkswage	Volkswage	CC VWX	4	2.0	4
	2013	Volkswage	Volkswage	CC VWX	2	3.6	6
	2013	Volkswage	Volkswage	CC 4MOTICVWX	3	3.6	6
	2013	Volkswage	Volkswage	Eos VWX	21	2.0	4
Diesel;	2013	Volkswage	Volkswage	GOLF VWX	72	2.0	4
Diesel;	2013	Volkswage	Volkswage	GOLF VWX	81	2.0	4
	2013	Volkswage	Volkswage	GOLF VWX	16	2.5	5
	2013	Volkswage	Volkswage	GOLF VWX	26	2.5	5
	2013	Volkswage	Volkswage	Golf R VWX	57	2.0	4
	2013	Volkswage	Volkswage	GTI VWX	22	2.0	4
	2013	Volkswage	Volkswage	GTI VWX	23	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	50	2.0	4
Diesel;	2013	Volkswage	Volkswage	Jetta VWX	71	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	86	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	87	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	51	2.0	4
Diesel;	2013	Volkswage	Volkswage	Jetta VWX	80	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	15	2.5	5
	2013	Volkswage	Volkswage	Jetta VWX	25	2.5	5
Diesel;	2013	Volkswage	Volkswage	JETTA SPO VWX	74	2.0	4
Diesel;	2013	Volkswage	Volkswage	JETTA SPO VWX	79	2.0	4
	2013	Volkswage	Volkswage	JETTA SPO VWX	14	2.5	5
	2013	Volkswage	Volkswage	JETTA SPO VWX	24	2.5	5
Diesel;	2013	Volkswage	Volkswage	Passat VWX	62	2.0	4
Diesel;	2013	Volkswage	Volkswage	Passat VWX	64	2.0	4
	2013	Volkswage	Volkswage	Passat VWX	83	2.5	5
	2013	Volkswage	Volkswage	Passat VWX	82	2.5	5
	2013	Volkswage	Volkswage	Passat VWX	63	3.6	6
	2013	Volkswage	Volkswage	TIGUAN VWX	68	2.0	4
	2013	Volkswage	Volkswage	TIGUAN VWX	56	2.0	4
	2013	Volkswage	Volkswage	TIGUAN 4MVWX	55	2.0	4

Diesel;	2013 Volkswagen	Volkswagen	TOUAREG VWX	54	3.0	6
	2013 Volkswagen	Volkswagen	TOUAREG VWX	78	3.6	6
Hybrid;	2013 Volkswagen	Volkswagen	Touareg H VWX	75	3.0	6



Trans in FE	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Auto(AM-S	30	42	34				39.0935	59.3437	46.1856
Manual(M	21	30	24				25.3	40.3	30.3902
Auto(AM-S	21	28	24				27.2	37.1	30.9119
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	35.9	28.8083
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S	16	23	18				19.1	30	22.8332
Auto(AM-S	16	22	18				19.2	28.9	22.6159
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				18.9	33.4	23.4887
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				18.9	33.4	23.4887
Auto(AM-S	18	26	21				22.1	34.7	26.4165
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Manual(M	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S7)	8	15	10				10	17.9	12.4782
Auto(AM-S	11	18	13				12.6	25.2	16.2581
Auto(AM-S	10	16	12				11.5	21.2	14.4817
Auto(AM-S	13	20	16				16.1	25.4	19.276

Manual(M6	12	20	15	14	24	17.2308
Auto(AM-S	13	20	16	16	25.4	19.197
Manual(M6	12	20	14	13	22.6	16.0722
Auto(AM-S	29	39	32	37.3	55.3	43.7011
Auto(AM-S	22	30	25	26.5	42.0656	31.7942
Manual(M	28	41	32	36.066	57.9978	43.4617
Manual(M	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
Manual(M	28	41	32	36.066	57.9978	43.4617
Manual(M	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.0395	37.7702	30.2701
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M	21	32	25	25.7923	44.3415	31.7736
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Manual(M	19	27	22	23.9	37.1	28.456
Auto(AM-S	24	33	27	29.9333	43.5096	34.8229
Manual(M	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M	24	34	28	28.8	46.2	34.6771
Manual(M	22	33	26	26.5556	44.9945	32.56
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	29	39	33	37.6	56.2	44.1798
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873

Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Unrd Hwy	Unrd Comb	Unr	Guzzler?	Air Aspir	IAir Aspira	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbochar	AMS	Automatec		6
29.8946	41.5209	34.2046			TC	Turbochar	AMS	Automatec		6
20.8146	29.9953	24.1394			TC	Turbochar	M	Manual		6
20.891	28.1035	23.6187			TC	Turbochar	AMS	Automatec		6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual		6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual		6
24.5044	32.5529	27.5721			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
18.3949	27.2332	21.5408			SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
13.1387	20.6025	15.6978	G		NA	Naturally	SA	Semi-Auto		8
19.9584	26.6824	22.5112			TC	Turbochar	SA	Semi-Auto		8
19.7289	28.2351	22.823			TC	Turbochar	SA	Semi-Auto		8
15.522	21.5458	17.7559			SC	Superchar	SA	Semi-Auto		8
18.74	27.62	21.9099			TC	Turbochar	SA	Semi-Auto		8
15.7409	23.3075	18.4339			NA	Naturally	AMS	Automatec		7
15.8793	22.1836	18.2078			NA	Naturally	AMS	Automatec		7
18.117	27.558	21.419			SC	Superchar	AMS	Automatec		7
17.0438	26.023	20.1767			SC	Superchar	M	Manual		6
18.117	27.558	21.419			SC	Superchar	AMS	Automatec		7
17.0438	26.023	20.1767			SC	Superchar	M	Manual		6
17.6699	25.953	20.6333			SC	Superchar	AMS	Automatec		7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automatec		7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automatec		7
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automatec		6
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automatec		6
17.751	25.2021	20.4751			TC	Turbochar	M	Manual		6
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto		6
15.0109	24.4645	18.1706			TC	Turbochar	SA	Semi-Auto		8
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto		6
14.0639	23.9773	17.2766	G		TC	Turbochar	SA	Semi-Auto		8
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto		6
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto		6
8.4232	14.7698	10.4424	G		TC	Turbochar	SA	Semi-Auto		7
10.6055	18.4729	13.1199	G		NA	Naturally	AMS	Automatec		7
9.7957	16.2453	11.9264	G		NA	Naturally	AMS	Automatec		7
13.4655	19.7573	15.718	G		NA	Naturally	AMS	Automatec		6

12.0883	19.9831	14.7021G	NA	Naturally AM	Manual	6
13.3954	19.7741	15.6701G	NA	Naturally AMS	Automated	6
11.5388	19.5451	14.1465G	NA	Naturally AM	Manual	6
28.6469	38.87	32.4925	TC	Turbocharged AMS	Automated	6
22.0202	29.5574	24.8746	TC	Turbocharged AMS	Automated	6
27.8088	40.6616	32.4203	TC	Turbocharged M	Manual	6
20.5408	29.7034	23.8517	TC	Turbocharged M	Manual	6
22.2864	28.5683	24.7338	NA	Naturally SA	Semi-Auto	6
21.7201	30.6767	25.0054	NA	Naturally M	Manual	5
21.1383	28.6751	23.9738	TC	Turbocharged AMS	Automated	6
27.8088	40.6616	32.4203	TC	Turbocharged M	Manual	6
20.5408	29.7034	23.8517	TC	Turbocharged M	Manual	6
21.2302	26.9749	23.4804	NA	Naturally SA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	Turbocharged AMS	Automated	6
20.9361	31.656	24.7	TC	Turbocharged M	Manual	6
17.4935	26.5716	20.6716	NA	Naturally SA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally SA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	Turbocharged AMS	Automated	6
29.8946	41.5209	34.2046	TC	Turbocharged AMS	Automated	6
29.6183	41.8508	34.104	TC	Turbocharged M	Manual	6
23.6446	31.0458	26.486	NA	Naturally SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally M	Manual	5
19.278	26.8882	22.0917	TC	Turbocharged M	Manual	6
24.2237	32.5108	27.3624	TC	Turbocharged AMS	Automated	6
21.2839	30.8324	24.7304	TC	Turbocharged M	Manual	6
23.7854	31.6043	26.7652	TC	Turbocharged AMS	Automated	6
29.8946	41.5209	34.2046	TC	Turbocharged AMS	Automated	6
23.1009	29.1554	25.4822	NA	Naturally SA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally M	Manual	5
21.8931	32.6043	25.6912	TC	Turbocharged M	Manual	6
29.6183	41.8508	34.104	TC	Turbocharged M	Manual	6
23.6446	31.0458	26.486	NA	Naturally SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally M	Manual	5
28.8556	39.4682	32.8278	TC	Turbocharged AMS	Automated	6
29.6183	41.8508	34.104	TC	Turbocharged M	Manual	6
23.6446	31.0458	26.486	NA	Naturally SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally M	Manual	5
30.4633	40.2057	34.1916	TC	Turbocharged AMS	Automated	6
30.8024	42.6219	35.1943	TC	Turbocharged M	Manual	6
22.1078	30.6611	25.2814	NA	Naturally SA	Semi-Auto	6
21.8993	32.1378	25.5642	NA	Naturally M	Manual	5
19.7174	27.8048	22.6868	NA	Naturally AMS	Automated	6
20.6233	26.0617	22.7606	TC	Turbocharged SA	Semi-Auto	6
18.1488	26.2617	21.0791	TC	Turbocharged M	Manual	6
20.402	25.8545	22.5412	TC	Turbocharged SA	Semi-Auto	6

19.649	28.9961	22.9829	TC	TurbocharçSA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally çSA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	SupercharçSA	Semi-Auto	8

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Y	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	F	2-Wheel DDVW	XV02.0	5		DU	Diesel, ultr	
N	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDVW	XV06.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XT02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XT03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XT03.0	5		DU	Diesel, ultr	
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDBEX	V06.0	85	333	GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDBEX	V06.0	85	333	GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDBEX	V06.0	85	333	GP	Gasoline	(F
Y	N	A	All Wheel IDBEX	V06.0	85	333	GP	Gasoline	(F
N	N	A	All Wheel IDBGT	V08.0	10		GPR	Gasoline	(F
N	N	A	All Wheel IDNLX	V06.5	10		GPR	Gasoline	(F
N	N	A	All Wheel IDNLX	V06.5	10		GPR	Gasoline	(F
Y	N	A	All Wheel IDAD	XV05.0	10		GP	Gasoline	(F

N	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (I
Y	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (F
N	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (I
Y	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXV03.	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	A	All Wheel IDAD XV02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDAD XV02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDAD XV02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXJ02.0	10		GP	Gasoline (F



Y	N	A	All Wheel IDADXT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F

Fuel Unit	Fuel Unit	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MPG	miles per gN	Not exemp		89	20				
MPG	miles per gN	Not exemp		89	20				
MPG	miles per gN	Not exemp		89	20				
MPG	miles per gN	Not exempt				89	20		
MPG	miles per gN	Not exempt				91	12		
MPG	miles per gN	Not exempt				91	12		
MPG	miles per gN	Not exempt				91	12		
MPG	miles per gN	Not exemp		81	10				
MPG	miles per gN	Not exemp		81	10				
MPG	miles per gN	Not exemp		84	12				
MPG	miles per gN	Not exemp		84	12				
MPG	miles per gN	Not exempt				98	16		
MPG	miles per gN	Not exempt				98	16		
MPG	miles per gN	Not exempt				98	16		
MPG	miles per gN	Not exempt						94	25
MPG	miles per gN	Not exempt				100	15		
MPG	miles per gN	Not exempt				107	15		
MPG	miles per gN	Not exempt				107	15		
MPG	miles per gN	Not exempt				90	28		
MPG	miles per gT	Truck							
MPG	miles per gT	Truck							
MPG	miles per gT	Truck							
MPG	miles per gN	Not exemp		84	13				
MPG	miles per gN	Not exemp		81	10				
MPG	miles per gN	Not exempt				90	13		
MPG	miles per gN	Not exempt				90	13		
MPG	miles per gN	Not exemp		84	13				
MPG	miles per gN	Not exemp		84	13				
MPG	miles per gN	Not exemp		81	10				
MPG	miles per gN	Not exempt				98	16		
MPG	miles per gN	Not exempt						94	25
MPG	miles per gN	Not exemp		74	13				
MPG	miles per gN	Not exempt							
MPG	miles per gN	Not exempt						74	13
MPG	miles per gN	Not exemp		102	13				
MPG	miles per gN	Not exemp		89	11				
MPG	miles per gN	Not exemp		89	11				
MPG	miles per gN	Not exemp		86	7				
MPG	miles per gN	Not exemp		86	7				
MPG	miles per gN	Not exemp		86	7				
MPG	miles per gN	Not exempt							
MPG	miles per gN	Not exempt							
MPG	miles per gN	Not exempt							
MPG	miles per gN	Not exempt							

MPG	miles per gN	Not exempt		
MPG	miles per gN	Not exempt		
MPG	miles per gN	Not exempt		
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt	81 7	
MPG	miles per gN	Not exempt	81 7	
MPG	miles per gN	Not exempt	81 7	
MPG	miles per gN	Not exempt	81 7	
MPG	miles per gN	Not exempt	94 13	
MPG	miles per gN	Not exempt	94 13	
MPG	miles per gN	Not exempt	94 13	
MPG	miles per gN	Not exempt	94 13	
MPG	miles per gN	Not exempt	77 11	
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	92 33	
MPG	miles per gN	Not exempt	92 33	
MPG	miles per gN	Not exempt	92 33	
MPG	miles per gN	Not exempt	92 33	
MPG	miles per gN	Not exempt	102 16	
MPG	miles per gN	Not exempt	102 16	
MPG	miles per gN	Not exempt	102 16	
MPG	miles per gN	Not exempt	102 16	
MPG	miles per gT	Truck		
MPG	miles per gT	Truck		
MPG	miles per gT	Truck		

MPG	miles per gT	Truck
MPG	miles per gT	Truck
MPG	miles per gT	Truck

Annual Fuel Economy	EPA Calculated	Comment	City2 FE (mi/gal)	Hwy2 FE (mi/gal)	Combined2 FE (mi/gal)	Low'd City2 FE (mi/gal)	Low'd Hwy2 FE (mi/gal)	Low'd Combined2 FE (mi/gal)	City2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide							
1700	1700								
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide							
2400	2400	reprocessed to pick up change to A3 quattro carline correction							
2200	2200	corrected forward speed to 8 on this CVT transmission							
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and							
2200	2200								
2200	2200	corrected forward speeds to 8							
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and							
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and							
2200	2200								
2050	2050	corrected forward speeds to 8, for this CVT trans							
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched							
2600	2600								
2700	2700								
2700	2700	added new A7 quattro data to the base level							
2700	2700	added new A7 quattro data to the base level							
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con							
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG							
2500	2500								
3150	3150								
2600	2600								
3150	3150								
3150	3150	corrected city CO2 value, typo							
2700	2700								
2850	2850								
2700	2700								
2850	2850								
2700	2700								
2850	2850								
2850	2850								
2200	2200								
2200	2200								
2850	2850								
4050	4050		8	13	10				9.5
3150	3150								
4050	4050		8	14	10				10.3
3350	3350								
4050	4050		8	13	10				9.5
4050	4050		8	14	10				10.3
5700	5700								
4400	4400								
4750	4750	adjusted release date							
3550	3550	corrected fuel consumption per ASTM rounding procedure							

3800	3800
3550	3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure
4050	4050
1800	1800
2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400
2150	2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g
2150	2150 corrected annual fuel cost, early label... update after Verify release 10
2400	2400 annual fuel cost corrected, post release 10 amd AMS used, corrected highway value from 28 t
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400
2300	2300 corrected annual fuel cost, update after Verify release 10
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers, UPDATE after Verify release 10
2700	2700 update after Verify release 10
2850	2850 UPDATE after Verify release 10
2300	2300
1700	1700
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
2600	2600
2100	2100
2300	2300 early label, upate after Verify release 10
2100	2100
1700	1700
2150	2150 corrected fuel savings and ratings
1900	1900
2200	2200
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1750	1750
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1700	1700
1650	1650
2150	2150
2050	2050 CORRCTED 5 YEAR FUEL SAVINGS
2500	2500
2500	2500
2700	2700
2500	2500 CORRECTED ANNUAL FUEL COST

2500	2500
3000	3000
2700	2700

Hwy2	UnaComb2	UrCity2	UnrC	Hwy2	UnrCmb2	Unr	Range2	-	Fuel2	Us	Fuel2	Us	Fuel2	Unit	Fuel2	Unit
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17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E	MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E	MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E	MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E	MPG	miles per g







Fuel2 Ann	Fuel2 EPA	Descriptio	Intake Val	Exhaust V	Carline CI	Carline CI	Car/Truck Calc	Appr Sales
		SIDI;	2	27	Small Stati	car	Vehicle Specific 5-cycle label	
			2	27	Small Stati	car	Derived 5-cycle label	
		SIDI;	2	27	Small Stati	car	Vehicle Specific 5-cycle label	
		SIDI;	2	27	Small Stati	car	Vehicle Specific 5-cycle label	
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
		SIDI;	2	25	Midsize Cacar		Derived 5-cycle label	
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
		SIDI; Unde	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
		SIDI; Unde	2	26	Large Cars car		Vehicle Specific 5-cycle label	
		SIDI;	2	26	Large Cars car		Vehicle Specific 5-cycle label	
		SIDI;	2	27	Small Stati	car	Derived 5-cycle label	
		SIDI;	2	233	Standard SUV 4WD		Vehicle Specific 5-cycle label	
		SIDI;	2	233	Standard SUV 4WD		Derived 5-cycle label	
			2	233	Standard SUV 4WD		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
		SIDI;	2	21	Two Seate car		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
4650	4650	FFV;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label	
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
4650	4650	FFV;	2	24	Compact Ccar		Vehicle Specific 5-cycle label	
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
4650	4650	FFV;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
4650	4650	FFV;	2	23	Subcompa car		Vehicle Specific 5-cycle label	
			2	21	Two Seate car		Vehicle Specific 5-cycle label	
			2	21	Two Seate car		Vehicle Specific 5-cycle label	
			2	21	Two Seate car		Vehicle Specific 5-cycle label	
		SIDI;	2	21	Two Seate car		Vehicle Specific 5-cycle label	

SIDI;	2	21	Two Seatecar	Vehicle Specific 5-cycle labe
SIDI;	2	21	Two Seatecar	Vehicle Specific 5-cycle label
SIDI;	2	21	Two Seatecar	Vehicle Specific 5-cycle labe
	2	24	Compact Ccar	Derived 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	23	Subcompa car	Derived 5-cycle label
	2	23	Subcompa car	Derived 5-cycle label
SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	23	Subcompa car	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Derived 5-cycle label
	1	15	Midsize Cacar	Vehicle Specific 5-cycle label
	1	15	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Derived 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	222	Special Pur <sup>1</sup>	Derived 5-cycle label
SIDI;	2	222	Special Pur <sup>1</sup>	Vehicle Specific 5-cycle label
SIDI;	2	223	Special Pur <sup>1</sup>	Derived 5-cycle label

	2	223	Special Pur1	Vehicle Specific 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label

Release Date	DEPA FE Label Database ID	Due Label	Label Rec	Relabel	Relabel Date	Suppress	Police/Em	Comment
6/11/2012	10148	N	N			N	N	Test Group
6/22/2012	10302	N	N			N	N	
6/11/2012	10147	N	N			N	N	Test Group
6/11/2012	10331	N	N			N	N	ENGINE CC
5/21/2012	10326	N	N			N	N	
5/21/2012	10360	N	N			N	N	
5/21/2012	9974	N	N			N	N	
5/21/2012	10327	N	N			N	N	
5/21/2012	10362	N	N			N	N	
5/21/2012	10363	N	N			N	N	
5/21/2012	9976	N	N			N	N	
6/18/2012	10328	N	N			N	N	
5/21/2012	10364	N	N			N	N	
6/25/2012	10288	N	N			N	N	
6/22/2012	10274	N	N			N	N	
6/22/2012	10272	N	Y	RH	Relabel - la	N	N	
6/22/2012	10273	N	Y	RH	Relabel - la	N	N	
8/6/2012	10646	N	N			N	N	
4/26/2012	10276	N	N			N	N	
7/13/2012	10540	N	N			N	N	Engine code
6/11/2012	10150	N	N			N	N	
7/16/2012	10203	N	N			N	N	
6/8/2012	10077	N	N			N	N	
12/3/2012	10452	N	N			N	N	
5/21/2012	9982	N	N			N	N	
5/21/2012	9985	N	N			N	N	
5/21/2012	9983	N	N			N	N	
5/21/2012	9986	N	N			N	N	
5/21/2012	9984	N	N			N	N	
7/30/2012	10075	N	N			N	N	Engine Code
7/30/2012	10074	N	N			N	N	Engine Code
6/18/2012	10166	N	N			N	N	ENGINE CC
6/18/2012	10167	N	N			N	N	ENGINE CC
6/18/2012	10200	N	N			N	N	
3/30/2012	10181	N	N			N	N	Continental
4/9/2012	10208	N	N			N	N	Engine Code
3/30/2012	10185	N	N			N	N	Continental
4/9/2012	10207	N	N			N	N	Engine Code
3/30/2012	10183	N	N			N	N	Continental
3/30/2012	10184	N	N			N	N	Continental
7/2/2012	10381	N	N			N	N	CHARGE AIR
8/7/2012	10615	N	N			N	N	
1/14/2013	10628	N	N			N	N	
6/11/2012	10647	N	N			N	N	ENGINE CC

6/22/2012	10237	N	N	N	N	ENGINE C
6/22/2012	10648	N	N	N	N	ENGINE CC
6/22/2012	10238	N	N	N	N	ENGINE C
7/19/2012	10750	N	N	N	N	
7/30/2012	10187	N	N	N	N	
6/25/2012	10707	N	N	N	N	
7/2/2012	10538	N	N	N	N	
7/30/2012	10751	N	N	N	N	
7/30/2012	10454	N	N	N	N	
7/30/2012	10277	N	N	N	N	
6/25/2012	10708	N	N	N	N	
7/2/2012	10539	N	N	N	N	
7/30/2012	10455	N	N	N	N	
1/16/2012	10186	N	N	N	N	
1/25/2012	10535	N	N	N	N	
1/16/2012	10532	N	N	N	N	
1/16/2012	10534	N	N	N	N	
6/11/2012	10160	N	N	N	N	
6/22/2012	10301	N	N	N	N	
6/25/2012	10305	N	N	N	N	
7/30/2012	10460	N	N	N	N	
7/30/2012	10466	N	N	N	N	
6/11/2012	10176	N	N	N	N	ENGINE CC
6/6/2012	10174	N	N	N	N	ENGINE CC
7/30/2012	10531	N	N	N	N	ENGINE CC
6/8/2012	10087	N	N	N	N	
6/22/2012	10300	N	N	N	N	
6/29/2012	10359	N	N	N	N	
6/29/2012	10358	N	N	N	N	
6/6/2012	10073	N	N	N	N	
6/25/2012	10304	N	N	N	N	
7/30/2012	10459	N	N	N	N	
7/30/2012	10465	N	N	N	N	
6/25/2012	10298	N	N	N	N	
6/25/2012	10303	N	N	N	N	
7/30/2012	10457	N	N	N	N	
7/30/2012	10464	N	N	N	N	
6/11/2012	10158	N	N	N	N	SCR Equip
6/18/2012	10163	N	N	N	N	SCR Equip
6/23/2012	10322	N	N	N	N	
6/23/2012	10321	N	N	N	N	
6/11/2012	10159	N	N	N	N	
6/18/2012	10196	N	N	N	N	
6/11/2012	10091	N	N	N	N	
6/11/2012	10086	N	N	N	N	

6/18/2012	10214	N	N	N	N	
6/25/2012	10319	N	N	N	N	
6/25/2012	10257	N	N	N	N	V6 CYLIND



Cyl Deact	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Energy St	Energy St	# Batterie	Battery Ty
N		Y	CONTINU	CN					
N		N		N					
N		Y	CONTINU	CN					
N		Y	CONTINU	CN					
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	Intake and	N					
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CN					
N		N		N					
N		Y	Continuou	N					
N		Y	Continuou	N					
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
Y	Deactivati	Y	Continuou	Y	Multi-lobe				
Y	Deactivati	Y	Continuou	Y	Multi-lobe				
N		Y	CONTINU	CN					
N		Y	CONTINU	CN					
N		Y	CONTINU	CN					
N		Y	INLET AND	N					
Y	Deactivati	Y	Continuou	Y	Multi-lobe				
N		Y	INLET AND	N					
Y	Deactivati	Y	Continuou	Y	Multi-lobe				
N		Y	INLET AND	N					
N		Y	INLET AND	N					
N		Y	INLET AND	N					
Y	ELECTRON	Y	HYDRAULI	N					
Y	ELECTRON	Y	HYDRAULI	N					
N		Y	INLET AND	N					

N	Y	INLET ANIN
N	Y	INLET ANDN
N	Y	INLET ANIN
N	N	N
N	Y	position ofN
N	N	N
N	Y	position ofN
N	Y	INLET CONN
N	Y	INLET CONN
N	Y	position ofN
N	N	N
N	Y	position ofN
N	Y	INLET CONN
N	Y	position ofN
N	Y	position ofN
N	Y	position ofN
N	Y	position ofN
N	Y	CONTINU CN
N	N	N
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
N	Y	CONTINU CN
N	Y	CONTINU CN
N	Y	CONTINU CN
N	Y	position ofN
N	N	N
N	N	N
N	N	N
N	Y	position ofN
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
N	N	N
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
N	N	N
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
N	Y	Electronic N
N	Y	position ofN
N	Y	position ofN
N	Y	position ofN

N	N	N		
N	Y	INTAKE / EN		
N	Y	MECHANICAL	Battery(s)	1 NiMH

Battery Ty	Total Volt	Batt Enerç	Batt Spec	Batt Charç	Comment	#	Capacit	Regen Br	Regen Br	Regen Br
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288	6	21.5 On-Board	Other	BRAKE PE Both
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Driver CntFuel Cell [Usable H2Fuel Cell (HEV-EV C# Drive MMotor GerMotor GerRated MotFuel Mete





N

1 Other

3 PHASE C

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Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell V	Off Board	Camless V	Oil Viscosi	Stop/Start	Stop/Start	Trans in FE
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AM-S	
CRDI	Common FN				N	5W40 N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit N				N	5W40 N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AV-Si	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AV-Si	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AV-Si	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
CRDI	Common F				N	5W30 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit N				N	5W40 N	No	Auto(AM-S	
GDI	Spark Ignit N				N	5W40 N	No	Auto(AM-S	
GDI	Spark Ignit N		N		N	5W40 VW N	No	Manual(M	
MFI	Multipoint N				N	5W30 VW N	No	Auto(S6)	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(S8)	
MFI	Multipoint N				N	5W30 VW N	No	Auto(S6)	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(S8)	
MFI	Multipoint N				N	5W30 VW N	No	Auto(S6)	
MFI	Multipoint N				N	5W30 VW N	No	Auto(S6)	
MFI	Multipoint				N	10W60 VVN	No	Auto(S7)	
MFI	Multipoint		N		N	5W30 VW N	No	Auto(AM-S	
MFI	Multipoint		N		N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	10W60 VVN	No	Auto(AM-S	

GDI	Spark Ignit	N	10W60 VVN	No	Manual(M6
GDI	Spark Ignit	N	10W60 VVN	No	Auto(AM-S
GDI	Spark Ignit	N	10W60 VVN	No	Manual(M6
CRDI	Common FN	N	5W40 N	No	Auto(AM-S
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Manual(M
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M.
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Manual(M
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
GDI	Spark Ignit	N	5W-40 VWN	No	Auto(S6)
GDI	Spark Ignit	N	5W-40 VWN	No	Auto(S6)
GDI	Spark Ignit	N	5W40 / VVN	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M
GDI	Spark IgnitN	N	5W40 N	No	Manual(M
GDI	Spark IgnitN	N	5W40 N	No	Auto(AM-S
GDI	Spark IgnitN	N	5W40 N	No	Manual(M
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Auto(AM-S
MFI	Multipoint	N	5W40 VW N	No	Auto(S6)
MFI	Multipoint	N	5W40 VW N	No	Manual(M.
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
CRDI	Common FN	N	5W40 N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M.
CRDI	Common FN	N	5W40 N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M.
CRDI	Common F	N	5W40 VW N	No	Auto(AM-S
CRDI	Common F	N	5W40 VW N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M.
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
GDI	Spark Ignit	N	5W40 VW N	No	Auto(S6)
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
GDI	Spark Ignit	N	5W40 VW N	No	Auto(S6)

CRDI	Common F		N	5W30 VW N	No	Auto(S8)
GDI	Spark Ignit		N	5W40 VW N	No	Auto(S8)
GDI	Spark IgnitN	N	N	5W40 VW N	No	Auto(S8)

Trans as I	Model Typ	Charge De	Charge De	Charge Su	EPA Calcul	EPA Calcul	MFR Calcul	EPA Calcul
Auto(AM-S								30.8
Auto(AM-S								46.2
Manual(MA3 frt man								30.4
Auto(AM-SA3 quattro								30.9
Auto(AV-S								35.2
Auto(S8)								30.8
Manual(M€								33.2
Auto(AV-S								35.2
Auto(S8)								30.8
Auto(S8)								30.8
Manual(M€								33.2
Auto(AV-S Audi A6 CV								36.9
Auto(S8)								30.8
Auto(S8) Audi A6 qu								28.1
Auto(S8)								27.5
Auto(S8)								27.5
Auto(S8)								27.5
Auto(S8)								19.3
Auto(S8)								29.5
Auto(S8)								28.8
Auto(S8) Audi Q7								22.9
Auto(S8)								28.1
Auto(AM-S								23
Auto(AM-S								22.6
Auto(AM-S								26.9
Manual(M€								23.5
Auto(AM-S								26.9
Manual(M€								23.5
Auto(AM-S								26.4
Auto(AM-S								25.5
Auto(AM-S								25.5
Auto(AM-STT Coupe c								33.3
Auto(AM-STT Coupe c								33.3
Manual(M€TTRS								25.6
Auto(S6)								17.2
Auto(S8)								23.6
Auto(S6)								17.4
Auto(S8)								21.8
Auto(S6)								17.2
Auto(S6)								17.4
Auto(S7)								12.6
Auto(AM-S								16.4
Auto(AM-S								14.5
Auto(AM-S								19.4

Manual(McGallardo C	17.4
Auto(AM-S	19.3
Manual(McGallardo S	16.1
Auto(AM-S	43.7
Auto(AM-S	31.8
Manual(Mc	43.4
Manual(M	30.7
Auto(S6)	31.6
Manual(M	31.9
Auto(AM-S	31.5
Manual(M	43.4
Manual(Mc	30.7
Auto(S6)	30.3
Auto(AM-S	32.3
Manual(MCC M6	31.8
Auto(S6)	25.8
Auto(S6)	24.8
Auto(AM-S	32.4
Auto(AM-S	46.2
Manual(MJetta Sport	46
Auto(S6)	33.1
Manual(M	32.2
Manual(M	28.5
Auto(AM-S	34.8
Manual(M	31.2
Auto(AM-S	35
Auto(AM-S	46.2
Auto(S6) Jetta Base	32.9
Manual(M	34.7
Manual(M	32.6
Manual(MJetta Sport	46
Auto(S6)	33.1
Manual(M	32.2
Auto(AM-S	44.2
Manual(MJetta Sport	46
Auto(S6)	33.1
Manual(M	32.2
Auto(AM-S	44.6
Manual(M	46.4
Auto(S6)	31.9
Manual(M	31.7
Auto(AM-S	28.5
Auto(S6) Tiguan froi	29.9
Manual(M	26.4
Auto(S6)	29.6

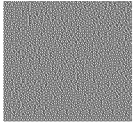
Auto(S8)	23.3
Auto(S8)	25
Auto(S8) Touareg H	28.2

FE Rating	(GHG Rating)	\$ You Save	\$ You Spend	City CO2	RHwy CO2	FComb CO2	CO2-Vol In	CO2-City U
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6	6		400	432	319	381	333
9	8	3100		336	243	294	259.8
6	6		400	442	296	376	350
6	6		400	442	316	374	325
7	7	600		373	304	342	293.8
6	6		400	437	297	374	345.7
7	7	600		397	276	343	320.4
7	7	600		373	304	342	293.8
6	6		400	437	297	374	345.7
6	6		400	437	297	374	345.7
7	7	600		397	276	343	320.4
7	7	1350		360	272	320	282
6	6		400	437	297	374	345.7
5	5		1400	482	326	412	383.5
5	5		1900	498	321	418	395.5
5	5		1900	498	321	418	395.5
5	5		1900	498	321	418	395.5
3	3		6150	675	430	565	559
6	6		900	450	325	394	352
6	6		900	450	314	389	358
4	4		4150	573	411	500	461
5	4	1400		541	369	464	446
4	4		4150	562	379	480	466
4	4		4150	558	398	486	463
5	5		1900	488	321	413	369
5	5		1900	441	355	402	443
5	5		1900	488	321	413	369
5	5		1900	441	355	402	443
5	5		1900	500	341	429	434
5	5		2650	530	330	440	427.3
5	5		2650	530	330	440	427.3
7	7	600		395	284	345	312
7	7	600		395	284	345	312
5	5		2650	499	350	432	419
2	2		8650	787	474	646	649
4	4		4150	590	364	488	466
2	2		8650	768	469	634	639
4	4		5150	638	370	517	510
2	2		8650	787	474	646	649
2	2		8650	768	469	634	639
1	1		16900	1050	599	847	885
2	2		10400	836	481	676	706
1	1		12150	902	547	742	771
3	3		6150	657	447	563	552



3	3		7400	734	511	633	635
3	3		6150	660	446	564	556
2	2		8650	768	452	625	681
8	7	2600		350	260	310	272
6	6	100		401	291	351	334.3
8	7	2600		361	248	310	281.3
6	6	2400		430	298	371	350.8
6	6	850		396	310	358	323.7
6	6	850		408	289	354	335.2
6	6		400	421	310	371	332
8	7	2600		361	248	310	281.3
6	6	2400		430	298	371	350.8
6	6	100		418	329	378	335.4
6	6	100		403	283	349	327.2
6	6	100		423	280	359	345.4
5	5		1900	507	334	429	419
5	5		2650	523	351	446	434
6	6	100		405	257	338	321
9	8	3100		336	243	294	259.8
9	8		3100	338	230	289	261.7
7	7	1350		374	286	334	315.6
7	7	1350		388	271	335	336.4
5	5		1400	459	331	401	372
7	7	1100		379	271	331	295
6	6	100		416	287	358	340.4
7	7	1100		372	280	331	300.9
9	8	3100		336	243	294	259.8
7	7	850		381	299	344	315
8	8	2100		361	262	316	307
7	7	600		403	272	344	333.9
9	8		3100	338	230	289	261.7
7	7	1350		374	286	334	315.6
7	7	1350		388	271	335	336.4
8	7	2850		348	256	307	270
9	8		3100	338	230	289	261.7
7	7	1350		374	286	334	315.6
7	7	1350		388	271	335	336.4
9	8	3100		331	240	290	268
9	8	3350		330	239	289	266
6	6	850		401	289	350	328.2
7	7	1350		430	273	359	339.6
6	6		900	449	319	391	372
6	6		900	435	350	397	344
5	5		1900	509	346	436	407
6	6		900	435	343	394	343.7



6	5	900	517	351	443	422
4	4	3400	520	391	462	416
5	5	1900	447	372	413	354

CO2-Hwy	CO2-Comb	CO2-City	CO2-Hwy	CO2-Comb	240V Char	120V Char	PHEV Total	City PHEV	Hwy PHEV
232	287.6	432	319	381					
171.2	219.9	336	243	294					
220	291.5	442	296	376					
239	286.3	442	316	374					
199.8	251.6	373.3	303.6	324.4					
218.7	288.6	436.9	296.8	373.9					
202.1	267.2	397.1	276.4	342.8					
199.8	251.6	373.3	303.6	324.4					
218.7	288.6	436.9	296.8	373.9					
218.7	288.6	436.9	296.8	373.9					
202.1	267.2	397.1	276.4	342.8					
189	240	360	272	320					
218.7	288.6	436.9	296.8	373.9					
233	315.8	481.7	326	411.6					
238.7	323.9	498	320.9	418.4					
238.7	323.9	498	320.9	418.4					
238.7	323.9	498	320.9	418.4					
346	463.2	675	430	564.8					
238	300.7	444	333	394					
230	300.4	449.6	314.3	388.7					
296	387	573	412	501					
260	362.3	541	369	464					
296	389.5	562	379	480					
307	392.8	558	398	486					
248	329.4	488	321	412.9					
266	242.9	440.6	355	402.1					
248	329.4	488	321	412.9					
266	242.9	440.6	355	402.1					
260	355.7	500	341	428.5					
251.6	348.3	530.4	329.7	439.5					
251.6	348.3	530.4	329.7	439.5					
210	266	395	284	344.6					
210	266	395	284	344.6					
259	347	498.9	350.4	432.1					
361	519.4	787	474	646					
265	375.6	590	364	488.3					
359	513	768	469	634					
288	410.1	638	370	517.4					
361	519.4	787	474	646					
359	513	768	469	634					
495	709.5	1050.2	598.8	847.1					
353	547.2	836	481	676.3					
418	612.2	902	547	742					
349	460.7	657	447	563					

370	515.8	734	511	633
348	462.4	660	446	564
391	550.5	768	452	625
184	232.4	350	260	310
211.2	278.9	401	290.6	351.3
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.7
227.6	280.5	396.3	310.3	358.2
207.6	277.8	407.6	288.8	354.1
220.9	282	421	310	371
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.7
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
200.9	290.4	422.9	279.9	358.6
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	405	257	338
171.2	219.9	336	243	294
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
240	312.6	459	331	401
203	254	379	271	331
215.5	284.2	415.9	287	357.9
198.4	254.8	372	280.4	330.6
171.2	219.9	336	243	294
214	269.6	381.3	298.8	344.2
192	255.3	360.5	262	316.2
197.2	272.4	403.3	271.8	344.3
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
181	230	348	256	307
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.3
206.8	279.9	429.9	273.1	359.3
238	311.7	449	319	391
251	302	435	350	397
248	335.5	509	346	436
246.1	299.8	435	343	394

248	343.7	517	351	443
281	355.3	520.1	390.6	461.8
267	314.9	447	372	413

Comb PHE	MDPV? or Adj Comb Vol Higher	Final Label	EPA calcul	Error? (EP/EPA_FUEL EPA_GHG EPA_INCR
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N	4.2	4.2	4.2	0
N	2.9	2.9	2.9	0
N	4.2	4.2	4.2	0
N	4.2	4.2	4.2	0
N	3.8	3.8	3.8	0
N	4.2	4.2	4.2	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	4.2	4.2	4.2	0
N	4.2	4.2	4.2	0
N	3.8	3.8	3.8	0
N	3.6	3.6	3.6	0
N	4.2	4.2	4.2	0
N	4.5	4.5	4.5	0
N	4.8	4.8	4.8	0
N	4.8	4.8	4.8	0
N	4.8	4.8	4.8	0
N	6.2	6.2	6.2	0
N	4.3	4.3	4.3	0
N	4.3	4.3	4.3	0
N	5.6	5.6	5.6	0
N	4.5	4.5	4.5	0
N	5.6	5.6	5.6	0
N	5.6	5.6	5.6	0
N	4.8	4.8	4.8	0
N	5	5	5	0
N	4.8	4.8	4.8	0
N	5	5	5	0
N	4.8	4.8	4.8	0
N	5	5	5	0
N	5	5	5	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	5	5	5	0
N	7.1	7.1	7.1	0
N	5.6	5.6	5.6	0
N	7.1	7.1	7.1	0
N	5.9	5.9	5.9	0
N	7.1	7.1	7.1	0
N	7.1	7.1	7.1	0
N	10	10	10	0
N	7.7	7.7	7.7	0
N	8.3	8.3	8.3	0
N	6.2	6.2	6.2	0

N	6.7	6.7	6.7	0
N	6.2	6.2	6.2	0
N	7.1	7.1	7.1	0
N	3.1	3.1	3.1	0
N	4	4	4	0
N	3.1	3.1	3.1	0
N	4.2	4.2	4.2	0
N	4	4	4	0
N	4	4	4	0
N	4.2	4.2	4.2	0
N	3.1	3.1	3.1	0
N	4.2	4.2	4.2	0
N	4.3	4.3	4.3	0
N	4	4	4	0
N	4	4	4	0
N	4.8	4.8	4.8	0
N	5	5	5	0
N	4	4	4	0
N	2.9	2.9	2.9	0
N	2.9	2.9	2.9	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	4.5	4.5	4.5	0
N	3.7	3.7	3.7	0
N	4	4	4	0
N	3.7	3.7	3.7	0
N	2.9	2.9	2.9	0
N	4	4	4	0
N	3.6	3.6	3.6	0
N	3.8	3.8	3.8	0
N	2.9	2.9	2.9	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	3	3	3	0
N	2.9	2.9	2.9	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	2.9	2.9	2.9	0
N	2.9	2.9	2.9	0
N	4	4	4	0
N	3.8	3.8	3.8	0
N	4.3	4.3	4.3	0
N	4.3	4.3	4.3	0
N	4.8	4.8	4.8	0
N	4.3	4.3	4.3	0

N	4.3	4.3	4.3	0
N	5.3	5.3	5.3	0
N	4.8	4.8	4.8	0



MFR\_EPA\_EPA\_CALC\_EPA\_CALC\_EPA\_RND\_EPA\_RND\_EPA\_RND\_EPA\_RND\_EPA\_UNR[EPA\_UNR[EPA\_UNR





## EPA\_UNR|EPA\_UNR|EPA\_UNR|EPA\_ADJ|EPA\_PHEV|Label Submitter

[illegible]

[illegible]

Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.

**To:** richard.thomas@vw.com[]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com[];  
liver.schmidt@vw.com[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 7/19/2012 9:36:12 PM  
**Subject:** re: 2013 FE Guide - Data in EPA's Verify data base as of 7/17/2012 attached;  
VW Group 2013 FE Guide-all-rel-dates-no-sales-7-17-2012.xlsx

Richard,

Thanks for making corrections and updating your 2013 labels over the past two weeks. Our macro didn't pick up any errors in the data currently in Verify.

Attached is a spreadsheet with all the 2013 FE Labels in Verify as of July 17, 2012.

Note that (as will be outlined in a forthcoming EPA guidance letter) the last day for manufacturers to make changes for the 2013 Printed Guide is August 29, 2012.

FYI----I'll include my previous email message to you from July 2, 2012 since it has a few more details about calculating fuel consumption value (gallons/100 miles).

As usual, thanks for your help.

Dave

**From:** David Good/AA/USEPA/US  
**To:** richard.thomas@vw.com  
**Cc:** oliver.schmidt@vw.com, Jim Snyder/AA/USEPA/US@EPA, Roberts French/AA/USEPA/US@EPA  
**Date:** 07/03/2012 12:10 PM  
**Subject:** re: 2013 FE Guide Errors in Verify; Many errors when calculating adjusted combined fuel consumption(gal/100 miles); Request to update any 2013 Labels submitted before May 11, 2012

Richard,

As we discussed over the phone yesterday---you were one of the few manufacturers who calculated fuel consumption correctly---good Job!

Dave

1. Errors in Verify: Attached is a spreadsheet with the 2013 FE Label errors in Verify as of June 29, 2012. The spreadsheet contains all the 2013 FE Label data in Verify as of June 29, 2012 including some of the new Release 10 fields (columns 141-184). Color coding is explained in the heading for each column, except for the various shades of green. Labels with errors are highlighted in green fill in the first few columns or almost all columns---with the field where the error occurred highlighted in yellow fill. [Normal Green (not pea green) means the error occurred in the Combined Adjusted Fuel Consumption (gal/100 miles) field.]

When you get a chance, please correct the errors--so I can forward the corrected data to DOE for posting on the web on the 1st and 15th of each month.

2. Errors in Combined Adjusted Fuel Consumption: I'm finding a lot of errors in the new field "Adjusted Combined Model Type Fuel Consumption" (column 165 of the attached spreadsheet). EPA calculated fuel consumption is in column 166. Some manufacturers are entering fuel economy values (mpg) values instead of fuel consumption (gallons per 100 miles). Some manufacturers are incorrectly calculating fuel consumption using the (incorrect) unrounded adjusted combined mpg value instead of the correct rounded adjusted combined mpg value (as prominently displayed on 2013 labels (window stickers)---as explained in more detail in Item 3, below.

When you get a chance, please correct the fuel consumption errors in Verify. [Note that I'm not currently sending fuel consumption values to DOE for posting on the web, so I don't need the fuel consumption errors corrected immediately. Please correct them as soon as possible, but if you need 2-3 weeks to correct them, that's OK with me.]

If there are errors in the fuel consumption value listed on the actual labels (window stickers) of your vehicles, please correct the labels as soon as practicable. Call or email me if you have questions about the fuel consumption values shown on the actual labels (window stickers) of your vehicles.

3. Mistake in the EPA Regulations for Calculating Fuel Consumption (600.311-12(c): For conventional vehicles (not EVs or PHEVs), there is a mistake in the current regulations at 600.311-12(c) which EPA proposed to correct in the 2017 greenhouse gas proposal (page 76FR 75392, Dec 1, 2011).

The current (incorrect) regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The unrounded value for combined fuel economy from 600.210-12(c)."

The (correct) proposed regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The value for combined fuel economy from 600.210-12(c) rounded to the nearest whole mpg." Please use the voluntarily lowered combined adjusted MPG value, if applicable.

We are making this change for several reasons, e.g. so that customers will be able to accurately calculate the fuel consumption of their vehicle from the information displayed on the label; so that two vehicles with the same combined fuel economy mpg values won't have different fuel consumption values displayed on the label, etc. One benefit to manufacturers and EPA is that this correction will result in fewer questions from consumers about how the fuel consumption values are calculated.

4. Request to update any 2013 FE Labels submitted to Verify before May 11, 2012: EPA and DOE are in the process of updating the information displayed at [www.fueleconomy.gov](http://www.fueleconomy.gov) to show the same type of information which is displayed on the 2013 window stickers, e.g. Fuel Economy (1-10) rating, Greenhouse Gas (1-10) Rating, Smog (1-10) rating, adjusted combined fuel consumption (values, adjusted combined CO2 (grams/mile) values, amount saved (or spent) over 5 years, battery charging time for EVs & PHEVs, etc. We anticipate that the website will be updated within the next couple of months. For this reason, we are requesting that manufacturers update any labels which were entered into EPA's Verify data base prior to May 11, 2012 (Verify Release 9 labels which don't contain this information).

If possible, please try to update those labels before August 6, 2012. Please call or email me if you need more time to update your labels.

Thanks

[attachment "VW\_Group\_2013 FEGuide1-all rel dates-no-sales-06-29-2012 PLUS new Rel10 fields.xlsx" deleted by David Good/AA/USEPA/US]



EPA com	VERIFY cc	Model Yr	(Mfr Name	Division	bCarline	Verify Mfr Index	(Mo Eng Displ # Cyl
		2013	Audi	Audi	A3	ADX	59 2.0 4
Diesel;		2013	Audi	Audi	A3	ADX	73 2.0 4
		2013	Audi	Audi	A3	ADX	58 2.0 4
		2013	Audi	Audi	A3 quattro	ADX	60 2.0 4
		2013	Audi	Audi	A4	ADX	35 2.0 4
		2013	Audi	Audi	A4 quattro	ADX	37 2.0 4
		2013	Audi	Audi	A4 quattro	ADX	40 2.0 4
		2013	Audi	Audi	A5 Cabriolet	ADX	36 2.0 4
		2013	Audi	Audi	A5 Cabriolet	ADX	39 2.0 4
		2013	Audi	Audi	A5 quattro	ADX	38 2.0 4
		2013	Audi	Audi	A5 quattro	ADX	41 2.0 4
		2013	Audi	Audi	A6	ADX	65 2.0 4
		2013	Audi	Audi	A6 quattro	ADX	70 2.0 4
		2013	Audi	Audi	A6 quattro	ADX	77 3.0 6
		2013	Audi	Audi	A7 quattro	ADX	76 3.0 6
Relabeled. Please include in 2013		2013	Audi	Audi	A8	ADX	128 3.0 6
Relabeled. Please include in 2013		2013	Audi	Audi	A8L	ADX	129 3.0 6
		2013	Audi	Audi	A8L	ADX	109 6.3 12
		2013	Audi	Audi	allroad quattro	ADX	134 2.0 4
		2013	Audi	Audi	Q5	ADX	91 2.0 4
		2013	Audi	Audi	Q7	ADX	61 3.0 6
Diesel;		2013	Audi	Audi	Q7	ADX	53 3.0 6
		2013	Audi	Audi	RS5	ADX	49 4.2 8
		2013	Audi	Audi	RS5 Cabriolet	ADX	52 4.2 8
		2013	Audi	Audi	S4	ADX	42 3.0 6
		2013	Audi	Audi	S4	ADX	45 3.0 6
		2013	Audi	Audi	S5	ADX	43 3.0 6
		2013	Audi	Audi	S5	ADX	46 3.0 6
		2013	Audi	Audi	S5 Cabriolet	ADX	44 3.0 6
		2013	Audi	Audi	S6	ADX	48 4.0 8
		2013	Audi	Audi	S7	ADX	47 4.0 8
		2013	Audi	Audi	TT Coupe	ADX	66 2.0 4
		2013	Audi	Audi	TT Roadster	ADX	67 2.0 4
		2013	Audi	Audi	TT RS Coup	ADX	69 2.5 5
		2013	Bentley	Bentley Motors	Continental	BEX	110 6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	108 4.0 8
		2013	Bentley	Bentley Motors	Continental	BEX	113 6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	107 4.0 8
		2013	Bentley	Bentley Motors	Continental	BEX	111 6.0 12
		2013	Bentley	Bentley Motors	Continental	BEX	112 6.0 12
Warning - if trans type is Audi		2013	Bugatti	Bugatti	Veyron	BGT	88 8.0 16
Warning - if trans type is Audi		2013	Lamborghini	Lamborghini	Aventador	NLX	92 6.5 12
Warning - if trans type is Audi		2013	Lamborghini	Lamborghini	Aventador	NLX	93 6.5 12
		2013	Lamborghini	Lamborghini	Gallardo	CNLX	30 5.2 10

	2013	Lamborghini	Lamborghini	Gallardo CNLX	32	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo SiNLX	31	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel;	2013	Volkswage	Volkswage	BEETLE VWX	94	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	19	2.0	4
Diesel;	2013	Volkswage	Volkswage	BEETLE VWX	84	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	89	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	17	2.5	5
	2013	Volkswage	Volkswage	BEETLE VWX	27	2.5	5
	2013	Volkswage	Volkswage	BEETLE COVWX	20	2.0	4
Diesel;	2013	Volkswage	Volkswage	BEETLE COVWX	85	2.0	4
	2013	Volkswage	Volkswage	BEETLE COVWX	90	2.0	4
	2013	Volkswage	Volkswage	BEETLE COVWX	18	2.5	5
	2013	Volkswage	Volkswage	CC VWX	1	2.0	4
	2013	Volkswage	Volkswage	CC VWX	4	2.0	4
	2013	Volkswage	Volkswage	CC VWX	2	3.6	6
	2013	Volkswage	Volkswage	CC 4MOTICVWX	3	3.6	6
	2013	Volkswage	Volkswage	Eos VWX	21	2.0	4
Diesel;	2013	Volkswage	Volkswage	GOLF VWX	72	2.0	4
Diesel;	2013	Volkswage	Volkswage	GOLF VWX	81	2.0	4
	2013	Volkswage	Volkswage	GOLF VWX	16	2.5	5
	2013	Volkswage	Volkswage	GOLF VWX	26	2.5	5
	2013	Volkswage	Volkswage	Golf R VWX	57	2.0	4
	2013	Volkswage	Volkswage	GTI VWX	22	2.0	4
	2013	Volkswage	Volkswage	GTI VWX	23	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	50	2.0	4
Diesel;	2013	Volkswage	Volkswage	Jetta VWX	71	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	86	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	87	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	51	2.0	4
Diesel;	2013	Volkswage	Volkswage	Jetta VWX	80	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	15	2.5	5
	2013	Volkswage	Volkswage	Jetta VWX	25	2.5	5
Diesel;	2013	Volkswage	Volkswage	JETTA SPO VWX	74	2.0	4
Diesel;	2013	Volkswage	Volkswage	JETTA SPO VWX	79	2.0	4
	2013	Volkswage	Volkswage	JETTA SPO VWX	14	2.5	5
	2013	Volkswage	Volkswage	JETTA SPO VWX	24	2.5	5
Diesel;	2013	Volkswage	Volkswage	Passat VWX	62	2.0	4
Diesel;	2013	Volkswage	Volkswage	Passat VWX	64	2.0	4
	2013	Volkswage	Volkswage	Passat VWX	83	2.5	5
	2013	Volkswage	Volkswage	Passat VWX	82	2.5	5
	2013	Volkswage	Volkswage	Passat VWX	63	3.6	6
	2013	Volkswage	Volkswage	TIGUAN VWX	68	2.0	4
	2013	Volkswage	Volkswage	TIGUAN VWX	56	2.0	4
	2013	Volkswage	Volkswage	TIGUAN 4MVWX	55	2.0	4

Diesel;	2013 Volkswagen	Volkswagen	TOUAREG VWX	54	3.0	6
	2013 Volkswagen	Volkswagen	TOUAREG VWX	78	3.6	6
Hybrid;	2013 Volkswagen	Volkswagen	Touareg H VWX	75	3.0	6

Trans in FE	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Auto(AM-S	30	42	34				39.0935	59.3437	46.1856
Manual(M	21	30	24				25.3	40.3	30.3902
Auto(AM-S	21	28	24				27.2	37.1	30.9119
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	35.9	28.8083
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S	16	23	18				19.1	30	22.8332
Auto(AM-S	16	22	18				19.2	28.9	22.6159
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				18.9	33.4	23.4887
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				18.9	33.4	23.4887
Auto(AM-S	18	26	21				22.1	34.7	26.4165
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Manual(M	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S7)	8	15	10				10	17.9	12.4782
Auto(AM-S	11	18	13				12.6	25.2	16.2581
Auto(AM-S	10	16	12				11.5	21.2	14.4817
Auto(AM-S	13	20	16				16.1	25.4	19.276

Manual(M6	12	20	15	14	24	17.2308
Auto(AM-S	13	20	16	16	25.4	19.197
Manual(M6	12	20	14	13	22.6	16.0722
Auto(AM-S	29	39	32	37.3	55.3	43.7011
Auto(AM-S	22	30	25	26.5	42.0656	31.7942
Manual(M	28	41	32	36.066	57.9978	43.4617
Manual(M	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
Manual(M	28	41	32	36.066	57.9978	43.4617
Manual(M	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.0395	37.7702	30.2701
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M	21	32	25	25.7923	44.3415	31.7736
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Manual(M	19	27	22	23.9	37.1	28.456
Auto(AM-S	24	33	27	29.9333	43.5096	34.8229
Manual(M	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M	24	34	28	28.8	46.2	34.6771
Manual(M	22	33	26	26.5556	44.9945	32.56
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	29	39	33	37.6	56.2	44.1798
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873

Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Unrd Hwy	Unrd Comb	Unr	Guzzler?	Air Aspir	IAir Aspira	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbochar	AMS	Automatec		6
29.8946	41.5209	34.2046			TC	Turbochar	AMS	Automatec		6
20.8146	29.9953	24.1394			TC	Turbochar	M	Manual		6
20.891	28.1035	23.6187			TC	Turbochar	AMS	Automatec		6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual		6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual		6
24.5044	32.5529	27.5721			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
18.3949	27.2332	21.5408			SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
13.1387	20.6025	15.6978	G		NA	Naturally	SA	Semi-Auto		8
19.9584	26.6824	22.5112			TC	Turbochar	SA	Semi-Auto		8
19.7289	28.2351	22.823			TC	Turbochar	SA	Semi-Auto		8
15.522	21.5458	17.7559			SC	Superchar	SA	Semi-Auto		8
18.74	27.62	21.9099			TC	Turbochar	SA	Semi-Auto		8
15.7409	23.3075	18.4339			NA	Naturally	AMS	Automatec		7
15.8793	22.1836	18.2078			NA	Naturally	AMS	Automatec		7
18.117	27.558	21.419			SC	Superchar	AMS	Automatec		7
17.0438	26.023	20.1767			SC	Superchar	M	Manual		6
18.117	27.558	21.419			SC	Superchar	AMS	Automatec		7
17.0438	26.023	20.1767			SC	Superchar	M	Manual		6
17.6699	25.953	20.6333			SC	Superchar	AMS	Automatec		7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automatec		7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automatec		7
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automatec		6
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automatec		6
17.751	25.2021	20.4751			TC	Turbochar	M	Manual		6
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto		6
15.0109	24.4645	18.1706			TC	Turbochar	SA	Semi-Auto		8
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto		6
14.0639	23.9773	17.2766	G		TC	Turbochar	SA	Semi-Auto		8
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto		6
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto		6
8.4232	14.7698	10.4424	G		TC	Turbochar	SA	Semi-Auto		7
10.6055	18.4729	13.1199	G		NA	Naturally	AMS	Automatec		7
9.7957	16.2453	11.9264	G		NA	Naturally	AMS	Automatec		7
13.4655	19.7573	15.718	G		NA	Naturally	AMS	Automatec		6

12.0883	19.9831	14.7021G	NA	Naturally AM	Manual	6
13.3954	19.7741	15.6701G	NA	Naturally AMS	Automated	6
11.5388	19.5451	14.1465G	NA	Naturally AM	Manual	6
28.6469	38.87	32.4925	TC	Turbocharged AMS	Automated	6
22.0202	29.5574	24.8746	TC	Turbocharged AMS	Automated	6
27.8088	40.6616	32.4203	TC	Turbocharged M	Manual	6
20.5408	29.7034	23.8517	TC	Turbocharged M	Manual	6
22.2864	28.5683	24.7338	NA	Naturally SA	Semi-Auto	6
21.7201	30.6767	25.0054	NA	Naturally M	Manual	5
21.1383	28.6751	23.9738	TC	Turbocharged AMS	Automated	6
27.8088	40.6616	32.4203	TC	Turbocharged M	Manual	6
20.5408	29.7034	23.8517	TC	Turbocharged M	Manual	6
21.2302	26.9749	23.4804	NA	Naturally SA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	Turbocharged AMS	Automated	6
20.9361	31.656	24.7	TC	Turbocharged M	Manual	6
17.4935	26.5716	20.6716	NA	Naturally SA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally SA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	Turbocharged AMS	Automated	6
29.8946	41.5209	34.2046	TC	Turbocharged AMS	Automated	6
29.6183	41.8508	34.104	TC	Turbocharged M	Manual	6
23.6446	31.0458	26.486	NA	Naturally SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally M	Manual	5
19.278	26.8882	22.0917	TC	Turbocharged M	Manual	6
24.2237	32.5108	27.3624	TC	Turbocharged AMS	Automated	6
21.2839	30.8324	24.7304	TC	Turbocharged M	Manual	6
23.7854	31.6043	26.7652	TC	Turbocharged AMS	Automated	6
29.8946	41.5209	34.2046	TC	Turbocharged AMS	Automated	6
23.1009	29.1554	25.4822	NA	Naturally SA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally M	Manual	5
21.8931	32.6043	25.6912	TC	Turbocharged M	Manual	6
29.6183	41.8508	34.104	TC	Turbocharged M	Manual	6
23.6446	31.0458	26.486	NA	Naturally SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally M	Manual	5
28.8556	39.4682	32.8278	TC	Turbocharged AMS	Automated	6
29.6183	41.8508	34.104	TC	Turbocharged M	Manual	6
23.6446	31.0458	26.486	NA	Naturally SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally M	Manual	5
30.4633	40.2057	34.1916	TC	Turbocharged AMS	Automated	6
30.8024	42.6219	35.1943	TC	Turbocharged M	Manual	6
22.1078	30.6611	25.2814	NA	Naturally SA	Semi-Auto	6
21.8993	32.1378	25.5642	NA	Naturally M	Manual	5
19.7174	27.8048	22.6868	NA	Naturally AMS	Automated	6
20.6233	26.0617	22.7606	TC	Turbocharged SA	Semi-Auto	6
18.1488	26.2617	21.0791	TC	Turbocharged M	Manual	6
20.402	25.8545	22.5412	TC	Turbocharged SA	Semi-Auto	6



19.649	28.9961	22.9829	TC	TurbocharçSA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally ÅSA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	SupercharçSA	Semi-Auto	8

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Y	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	F	2-Wheel DDVW	XV02.0U5N		5	DU	Diesel, ultr	
N	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	F	2-Wheel DDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDVW	XV06.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XT02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XT03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XT03.03UG		5	DU	Diesel, ultr	
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XJ03.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
N	N	A	All Wheel IDAD	XV02.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDBEX	V06.0	85	333	GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDBEX	V06.0	85	333	GP	Gasoline	(F
Y	N	A	All Wheel IDAD	XV04.0	10		GP	Gasoline	(F
Y	N	A	All Wheel IDBEX	V06.0	85	333	GP	Gasoline	(F
Y	N	A	All Wheel IDBEX	V06.0	85	333	GP	Gasoline	(F
N	N	A	All Wheel IDBGT	V08.0	10		GPR	Gasoline	(F
N	N	A	All Wheel IDNLX	V06.5	10		GPR	Gasoline	(F
N	N	A	All Wheel IDNLX	V06.5	10		GPR	Gasoline	(F
Y	N	A	All Wheel IDAD	XV05.0	10		GP	Gasoline	(F

N	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (I
Y	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (F
N	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (I
Y	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXV03.	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	A	All Wheel IDAD XV02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDAD XV02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDAD XV02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Y	N	F	2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXJ02.0	10		GP	Gasoline (F

Y	N	A	All Wheel IDADXT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F

Fuel Unit	Fuel Unit	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MPG	miles per gN	Not exemp		89	20				
MPG	miles per gN	Not exemp		89	20				
MPG	miles per gN	Not exemp		89	20				
MPG	miles per gN	Not exempt				89	20		
MPG	miles per gN	Not exempt				91	12		
MPG	miles per gN	Not exempt				91	12		
MPG	miles per gN	Not exempt				91	12		
MPG	miles per gN	Not exemp		81	10				
MPG	miles per gN	Not exemp		81	10				
MPG	miles per gN	Not exemp		84	12				
MPG	miles per gN	Not exemp		84	12				
MPG	miles per gN	Not exempt				98	16		
MPG	miles per gN	Not exempt				98	16		
MPG	miles per gN	Not exempt				98	16		
MPG	miles per gN	Not exempt						94	25
MPG	miles per gN	Not exempt				100	15		
MPG	miles per gN	Not exempt				107	15		
MPG	miles per gN	Not exempt				107	15		
MPG	miles per gN	Not exempt				90	28		
MPG	miles per gT	Truck							
MPG	miles per gT	Truck							
MPG	miles per gT	Truck							
MPG	miles per gN	Not exemp		84	13				
MPG	miles per gN	Not exemp		81	10				
MPG	miles per gN	Not exempt				90	13		
MPG	miles per gN	Not exempt				90	13		
MPG	miles per gN	Not exemp		84	13				
MPG	miles per gN	Not exemp		84	13				
MPG	miles per gN	Not exemp		81	10				
MPG	miles per gN	Not exempt				98	16		
MPG	miles per gN	Not exempt						94	25
MPG	miles per gN	Not exemp		74	13				
MPG	miles per gN	Not exempt							
MPG	miles per gN	Not exempt						74	13
MPG	miles per gN	Not exemp		102	13				
MPG	miles per gN	Not exemp		89	11				
MPG	miles per gN	Not exemp		89	11				
MPG	miles per gN	Not exemp		86	7				
MPG	miles per gN	Not exemp		86	7				
MPG	miles per gN	Not exemp		86	7				
MPG	miles per gN	Not exempt							
MPG	miles per gN	Not exempt							
MPG	miles per gN	Not exempt							
MPG	miles per gN	Not exempt							

MPG	miles per gN	Not exempt		
MPG	miles per gN	Not exempt		
MPG	miles per gN	Not exempt		
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt		85 15
MPG	miles per gN	Not exempt	81 7	
MPG	miles per gN	Not exempt	81 7	
MPG	miles per gN	Not exempt	81 7	
MPG	miles per gN	Not exempt	81 7	
MPG	miles per gN	Not exempt	94 13	
MPG	miles per gN	Not exempt	94 13	
MPG	miles per gN	Not exempt	94 13	
MPG	miles per gN	Not exempt	94 13	
MPG	miles per gN	Not exempt	77 11	
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt		94 15
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	94 16	
MPG	miles per gN	Not exempt	92 33	
MPG	miles per gN	Not exempt	92 33	
MPG	miles per gN	Not exempt	92 33	
MPG	miles per gN	Not exempt	92 33	
MPG	miles per gN	Not exempt	102 16	
MPG	miles per gN	Not exempt	102 16	
MPG	miles per gN	Not exempt	102 16	
MPG	miles per gN	Not exempt	102 16	
MPG	miles per gT	Truck		
MPG	miles per gT	Truck		
MPG	miles per gT	Truck		

MPG	miles per gT	Truck
MPG	miles per gT	Truck
MPG	miles per gT	Truck

Annual Fuel Economy	EPA Calculated	Comment	City2 FE (mi/gal)	Hwy2 FE (mi/gal)	Combined2 FE (mi/gal)	Low'd City2 FE (mi/gal)	Low'd Hwy2 FE (mi/gal)	Low'd Combined2 FE (mi/gal)	City2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide							
1700	1700								
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide							
2400	2400	reprocessed to pick up change to A3 quattro carline correction							
2200	2200	corrected forward speed to 8 on this CVT transmission							
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and							
2200	2200								
2200	2200	corrected forward speeds to 8							
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and							
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and							
2200	2200								
2050	2050	corrected forward speeds to 8, for this CVT trans							
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched							
2600	2600								
2700	2700								
2700	2700	added new A7 quattro data to the base level							
2700	2700	added new A7 quattro data to the base level							
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con							
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG							
2500	2500								
3150	3150								
2600	2600								
3150	3150								
3150	3150	corrected city CO2 value, typo							
2700	2700								
2850	2850								
2700	2700								
2850	2850								
2700	2700								
2850	2850								
2850	2850								
2200	2200								
2200	2200								
2850	2850								
4050	4050		8	13	10				9.5
3150	3150								
4050	4050		8	14	10				10.3
3350	3350								
4050	4050		8	13	10				9.5
4050	4050		8	14	10				10.3
5700	5700								
4400	4400								
4750	4750	adjusted release date							
3550	3550	corrected fuel consumption per ASTM rounding procedure							



3800	3800
3550	3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure
4050	4050
1800	1800
2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400
2150	2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g
2150	2150 corrected annual fuel cost, early label... update after Verify release 10
2400	2400 annual fuel cost corrected, post release 10 amd AMS used, corrected highway value from 28 t
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400
2300	2300 corrected annual fuel cost, update after Verify release 10
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers, UPDATE after Verify release 10
2700	2700 update after Verify release 10
2850	2850 UPDATE after Verify release 10
2300	2300
1700	1700
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
2600	2600
2100	2100
2300	2300 early label, upate after Verify release 10
2100	2100
1700	1700
2150	2150 corrected fuel savings and ratings
1900	1900
2200	2200
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1750	1750
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1700	1700
1650	1650
2150	2150
2050	2050 CORRCTED 5 YEAR FUEL SAVINGS
2500	2500
2500	2500
2700	2700
2500	2500 CORRECTED ANNUAL FUEL COST

2500	2500
3000	3000
2700	2700

Hwy2	UnaComb2	UrCity2	UnrC	Hwy2	UnrCmb2	Unr	Range2	-	Fuel2	Us	Fuel2	Us	Fuel2	Unit	Fuel2	Unit
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17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E	MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E	MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E	MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E	MPG	miles per g





Fuel2 Ann	Fuel2 EPA	Descripto	Intake Val	Exhaust V	Carline CI	Carline CI	Car/Truck Calc	Appr Sales
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		SIDI;	2	27	Small Stati car		Vehicle Specific 5-cycle label
			2	27	Small Stati car		Derived 5-cycle label
		SIDI;	2	27	Small Stati car		Vehicle Specific 5-cycle label
		SIDI;	2	27	Small Stati car		Vehicle Specific 5-cycle label
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label
		SIDI;	2	25	Midsize Cacar		Derived 5-cycle label
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label
		SIDI; Unde	2	25	Midsize Cacar		Vehicle Specific 5-cycle label
		SIDI; Unde	2	26	Large Cars car		Vehicle Specific 5-cycle label
		SIDI;	2	26	Large Cars car		Vehicle Specific 5-cycle label
		SIDI;	2	27	Small Stati car		Derived 5-cycle label
		SIDI;	2	233	Standard SUV 4WD		Vehicle Specific 5-cycle label
		SIDI;	2	233	Standard SUV 4WD		Derived 5-cycle label
			2	233	Standard SUV 4WD		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label
		SIDI;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
		SIDI;	2	21	Two Seate car		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
4650	4650	FFV;	2	25	Midsize Cacar		Vehicle Specific 5-cycle label
		SIDI;	2	24	Compact Ccar		Vehicle Specific 5-cycle label
4650	4650	FFV;	2	24	Compact Ccar		Vehicle Specific 5-cycle label
		SIDI;	2	23	Subcompa car		Vehicle Specific 5-cycle label
4650	4650	FFV;	2	23	Subcompa car		Vehicle Specific 5-cycle label
4650	4650	FFV;	2	23	Subcompa car		Vehicle Specific 5-cycle label
			2	21	Two Seate car		Vehicle Specific 5-cycle label
			2	21	Two Seate car		Vehicle Specific 5-cycle label
			2	21	Two Seate car		Vehicle Specific 5-cycle label
		SIDI;	2	21	Two Seate car		Vehicle Specific 5-cycle label

SIDI;	2	21	Two Seatecar	Vehicle Specific 5-cycle labe
SIDI;	2	21	Two Seatecar	Vehicle Specific 5-cycle label
SIDI;	2	21	Two Seatecar	Vehicle Specific 5-cycle labe
	2	24	Compact Ccar	Derived 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	23	Subcompa car	Derived 5-cycle label
	2	23	Subcompa car	Derived 5-cycle label
SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	23	Subcompa car	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	23	Subcompa car	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Derived 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	24	Compact Ccar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Derived 5-cycle label
	1	15	Midsize Cacar	Vehicle Specific 5-cycle label
	1	15	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Derived 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Derived 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
	2	27	Small Stati car	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	25	Midsize Cacar	Vehicle Specific 5-cycle label
SIDI;	2	222	Special Pur <sup>1</sup>	Derived 5-cycle label
SIDI;	2	222	Special Pur <sup>1</sup>	Vehicle Specific 5-cycle label
SIDI;	2	223	Special Pur <sup>1</sup>	Derived 5-cycle label

	2	223	Special Pur1	Vehicle Specific 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label
SIDI;	2	223	Special Pur1	Derived 5-cycle label



Release Date	DEPA FE Label Database ID	Due Label	Label Rec	Relabel	Relabel Date	Suppress	Police/Em	Comment
6/11/2012	10148	N	N			N	N	Test Group
6/22/2012	10302	N	N			N	N	
6/11/2012	10147	N	N			N	N	Test Group
6/11/2012	10331	N	N			N	N	ENGINE CC
5/21/2012	10326	N	N			N	N	
5/21/2012	10360	N	N			N	N	
5/21/2012	9974	N	N			N	N	
5/21/2012	10327	N	N			N	N	
5/21/2012	10362	N	N			N	N	
5/21/2012	10363	N	N			N	N	
5/21/2012	9976	N	N			N	N	
6/18/2012	10328	N	N			N	N	
5/21/2012	10364	N	N			N	N	
6/25/2012	10288	N	N			N	N	
6/22/2012	10274	N	N			N	N	
6/22/2012	10272	N	Y	RH	Relabel - la	N	N	
6/22/2012	10273	N	Y	RH	Relabel - la	N	N	
8/6/2012	10646	N	N			N	N	
4/26/2012	10276	N	N			N	N	
7/13/2012	10540	N	N			N	N	Engine cod
6/11/2012	10150	N	N			N	N	
7/16/2012	10203	N	N			N	N	
6/8/2012	10077	N	N			N	N	
12/3/2012	10452	N	N			N	N	
5/21/2012	9982	N	N			N	N	
5/21/2012	9985	N	N			N	N	
5/21/2012	9983	N	N			N	N	
5/21/2012	9986	N	N			N	N	
5/21/2012	9984	N	N			N	N	
7/30/2012	10075	N	N			N	N	Engine Coc
7/30/2012	10074	N	N			N	N	Engine Coc
6/18/2012	10166	N	N			N	N	ENGINE CC
6/18/2012	10167	N	N			N	N	ENGINE CC
6/18/2012	10200	N	N			N	N	
3/30/2012	10181	N	N			N	N	Continental
4/9/2012	10208	N	N			N	N	Engine Coc
3/30/2012	10185	N	N			N	N	Continental
4/9/2012	10207	N	N			N	N	Engine Coc
3/30/2012	10183	N	N			N	N	Continental
3/30/2012	10184	N	N			N	N	Continental
7/2/2012	10381	N	N			N	N	CHARGE AI
8/7/2012	10615	N	N			N	N	
1/14/2013	10628	N	N			N	N	
6/11/2012	10647	N	N			N	N	ENGINE CC

6/22/2012	10237	N	N	N	N	ENGINE C
6/22/2012	10648	N	N	N	N	ENGINE CC
6/22/2012	10238	N	N	N	N	ENGINE C
7/19/2012	10750	N	N	N	N	
7/30/2012	10187	N	N	N	N	
6/25/2012	10707	N	N	N	N	
7/2/2012	10538	N	N	N	N	
7/30/2012	10751	N	N	N	N	
7/30/2012	10454	N	N	N	N	
7/30/2012	10277	N	N	N	N	
6/25/2012	10708	N	N	N	N	
7/2/2012	10539	N	N	N	N	
7/30/2012	10455	N	N	N	N	
1/16/2012	10186	N	N	N	N	
1/25/2012	10535	N	N	N	N	
1/16/2012	10532	N	N	N	N	
1/16/2012	10534	N	N	N	N	
6/11/2012	10160	N	N	N	N	
6/22/2012	10301	N	N	N	N	
6/25/2012	10305	N	N	N	N	
7/30/2012	10460	N	N	N	N	
7/30/2012	10466	N	N	N	N	
6/11/2012	10176	N	N	N	N	ENGINE CC
6/6/2012	10174	N	N	N	N	ENGINE CC
7/30/2012	10531	N	N	N	N	ENGINE CC
6/8/2012	10087	N	N	N	N	
6/22/2012	10300	N	N	N	N	
6/29/2012	10359	N	N	N	N	
6/29/2012	10358	N	N	N	N	
6/6/2012	10073	N	N	N	N	
6/25/2012	10304	N	N	N	N	
7/30/2012	10459	N	N	N	N	
7/30/2012	10465	N	N	N	N	
6/25/2012	10298	N	N	N	N	
6/25/2012	10303	N	N	N	N	
7/30/2012	10457	N	N	N	N	
7/30/2012	10464	N	N	N	N	
6/11/2012	10158	N	N	N	N	SCR Equip
6/18/2012	10163	N	N	N	N	SCR Equip
6/23/2012	10322	N	N	N	N	
6/23/2012	10321	N	N	N	N	
6/11/2012	10159	N	N	N	N	
6/18/2012	10196	N	N	N	N	
6/11/2012	10091	N	N	N	N	
6/11/2012	10086	N	N	N	N	

6/18/2012	10214	N	N	N	N	
6/25/2012	10319	N	N	N	N	
6/25/2012	10257	N	N	N	N	V6 CYLIND

Cyl Deact	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Energy St	Energy St	# Batterie	Battery Ty
N		Y	CONTINU	CN					
N		N		N					
N		Y	CONTINU	CN					
N		Y	CONTINU	CN					
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	Intake and	N					
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CN					
N		N		N					
N		Y	Continuou	N					
N		Y	Continuou	N					
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
N		Y	CONTINU	CY	AUDI VALV				
Y	Deactivati	Y	Continuou	Y	Multi-lobe				
Y	Deactivati	Y	Continuou	Y	Multi-lobe				
N		Y	CONTINU	CN					
N		Y	CONTINU	CN					
N		Y	CONTINU	CN					
N		Y	INLET AND	N					
Y	Deactivati	Y	Continuou	Y	Multi-lobe				
N		Y	INLET AND	N					
Y	Deactivati	Y	Continuou	Y	Multi-lobe				
N		Y	INLET AND	N					
N		Y	INLET AND	N					
N		Y	INLET AND	N					
Y	ELECTRON	Y	HYDRAULI	N					
Y	ELECTRON	Y	HYDRAULI	N					
N		Y	INLET AND	N					

N	Y	INLET ANIN
N	Y	INLET ANDN
N	Y	INLET ANIN
N	N	N
N	Y	position ofN
N	N	N
N	Y	position ofN
N	Y	INLET CONN
N	Y	INLET CONN
N	Y	position ofN
N	N	N
N	Y	position ofN
N	Y	INLET CONN
N	Y	position ofN
N	Y	position ofN
N	Y	position ofN
N	Y	position ofN
N	Y	CONTINU CN
N	N	N
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
N	Y	CONTINU CN
N	Y	CONTINU CN
N	Y	CONTINU CN
N	Y	position ofN
N	N	N
N	N	N
N	N	N
N	Y	position ofN
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
N	N	N
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
N	N	N
N	N	N
N	Y	INLET CONN
N	Y	INLET CONN
N	Y	Electronic N
N	Y	position ofN
N	Y	position ofN
N	Y	position ofN

N	N	N		
N	Y	INTAKE / EN		
N	Y	MECHANICAL	Battery(s)	1 NiMH

Battery Ty	Total Volt	Batt Enerç	Batt Spec	Batt Charç	Comment	#	Capacit	Regen Br	Regen Br	Regen Br
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288	6	21.5 On-Board	Other	BRAKE PE Both
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Driver CntFuel Cell [Usable H2Fuel Cell (HEV-EV C# Drive MMotor GerMotor GerRated MotFuel Mete



N

1 Other

3 PHASE C

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Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell V	Off Board	Camless V	Oil Viscosi	Stop/Start	Stop/Start	Trans in FE
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AM-S	
CRDI	Common FN				N	5W40 N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit N				N	5W40 N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AV-Si	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AV-Si	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AV-Si	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(S8)	
CRDI	Common F				N	5W30 VW N	No	Auto(S8)	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W40 VW N	No	Manual(M	
GDI	Spark Ignit				N	5W40 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit N				N	5W40 N	No	Auto(AM-S	
GDI	Spark Ignit N				N	5W40 N	No	Auto(AM-S	
GDI	Spark Ignit N		N		N	5W40 VW N	No	Manual(M	
MFI	Multipoint N				N	5W30 VW N	No	Auto(S6)	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(S8)	
MFI	Multipoint N				N	5W30 VW N	No	Auto(S6)	
GDI	Spark Ignit				N	5W30 VW N	No	Auto(S8)	
MFI	Multipoint N				N	5W30 VW N	No	Auto(S6)	
MFI	Multipoint N				N	5W30 VW N	No	Auto(S6)	
MFI	Multipoint				N	10W60 VVN	No	Auto(S7)	
MFI	Multipoint		N		N	5W30 VW N	No	Auto(AM-S	
MFI	Multipoint		N		N	5W30 VW N	No	Auto(AM-S	
GDI	Spark Ignit				N	10W60 VVN	No	Auto(AM-S	

GDI	Spark Ignit	N	10W60 VVN	No	Manual(M6
GDI	Spark Ignit	N	10W60 VVN	No	Auto(AM-S
GDI	Spark Ignit	N	10W60 VVN	No	Manual(M6
CRDI	Common FN	N	5W40 N	No	Auto(AM-S
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Manual(M
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M.
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Manual(M
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
GDI	Spark Ignit	N	5W-40 VVN	No	Auto(S6)
GDI	Spark Ignit	N	5W-40 VVN	No	Auto(S6)
GDI	Spark Ignit	N	5W40 / VVN	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M
GDI	Spark IgnitN	N	5W40 N	No	Manual(M
GDI	Spark IgnitN	N	5W40 N	No	Auto(AM-S
GDI	Spark IgnitN	N	5W40 N	No	Manual(M
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Auto(AM-S
MFI	Multipoint	N	5W40 VW N	No	Auto(S6)
MFI	Multipoint	N	5W40 VW N	No	Manual(M.
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
CRDI	Common FN	N	5W40 N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M.
CRDI	Common FN	N	5W40 N	No	Auto(AM-S
CRDI	Common FN	N	5W40 N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M.
CRDI	Common F	N	5W40 VW N	No	Auto(AM-S
CRDI	Common F	N	5W40 VW N	No	Manual(M
MFI	Multipoint	N	10W40 / VN	No	Auto(S6)
MFI	Multipoint	N	10W40 / VN	No	Manual(M.
GDI	Spark Ignit	N	5W40 VW N	No	Auto(AM-S
GDI	Spark Ignit	N	5W40 VW N	No	Auto(S6)
GDI	Spark Ignit	N	5W40 VW N	No	Manual(M
GDI	Spark Ignit	N	5W40 VW N	No	Auto(S6)

CRDI	Common F		N	5W30 VW N	No	Auto(S8)
GDI	Spark Ignit		N	5W40 VW N	No	Auto(S8)
GDI	Spark IgnitN	N	N	5W40 VW N	No	Auto(S8)

Trans as I	Model Typ	Charge De	Charge De	Charge Su	EPA Calcul	EPA Calcul	MFR Calcul	EPA Calcul
	Auto(AM-S							30.8
	Auto(AM-S							46.2
	Manual(MA3 frt man							30.4
	Auto(AM-SA3 quattro							30.9
	Auto(AV-S							35.2
	Auto(S8)							30.8
	Manual(M€							33.2
	Auto(AV-S							35.2
	Auto(S8)							30.8
	Auto(S8)							30.8
	Manual(M€							33.2
	Auto(AV-S Audi A6 CV							36.9
	Auto(S8)							30.8
	Auto(S8) Audi A6 qu							28.1
	Auto(S8)							27.5
	Auto(S8)							27.5
	Auto(S8)							27.5
	Auto(S8)							19.3
	Auto(S8)							29.5
	Auto(S8)							28.8
	Auto(S8) Audi Q7							22.9
	Auto(S8)							28.1
	Auto(AM-S							23
	Auto(AM-S							22.6
	Auto(AM-S							26.9
	Manual(M€							23.5
	Auto(AM-S							26.9
	Manual(M							23.5
	Auto(AM-S							26.4
	Auto(AM-S							25.5
	Auto(AM-S							25.5
	Auto(AM-STT Coupe c							33.3
	Auto(AM-STT Coupe c							33.3
	Manual(M€TTRS							25.6
	Auto(S6)							17.2
	Auto(S8)							23.6
	Auto(S6)							17.4
	Auto(S8)							21.8
	Auto(S6)							17.2
	Auto(S6)							17.4
	Auto(S7)							12.6
	Auto(AM-S							16.4
	Auto(AM-S							14.5
	Auto(AM-S							19.4



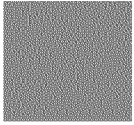
Manual(McGallardo C	17.4
Auto(AM-S	19.3
Manual(McGallardo S	16.1
Auto(AM-S	43.7
Auto(AM-S	31.8
Manual(Mc	43.4
Manual(M	30.7
Auto(S6)	31.6
Manual(M	31.9
Auto(AM-S	31.5
Manual(M	43.4
Manual(Mc	30.7
Auto(S6)	30.3
Auto(AM-S	32.3
Manual(MCC M6	31.8
Auto(S6)	25.8
Auto(S6)	24.8
Auto(AM-S	32.4
Auto(AM-S	46.2
Manual(MJetta Sport	46
Auto(S6)	33.1
Manual(M	32.2
Manual(M	28.5
Auto(AM-S	34.8
Manual(M	31.2
Auto(AM-S	35
Auto(AM-S	46.2
Auto(S6) Jetta Base	32.9
Manual(M	34.7
Manual(M	32.6
Manual(MJetta Sport	46
Auto(S6)	33.1
Manual(M	32.2
Auto(AM-S	44.2
Manual(MJetta Sport	46
Auto(S6)	33.1
Manual(M	32.2
Auto(AM-S	44.6
Manual(M	46.4
Auto(S6)	31.9
Manual(M	31.7
Auto(AM-S	28.5
Auto(S6) Tiguan froi	29.9
Manual(M	26.4
Auto(S6)	29.6

Auto(S8)	23.3
Auto(S8)	25
Auto(S8) Touareg H	28.2

FE Rating	(GHG Rating)	\$ You Save	\$ You Spend	City CO2	RHwy CO2	FComb CO2	CO2-Vol In	CO2-City U
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6	6		400	432	319	381	333
9	8	3100		336	243	294	259.8
6	6		400	442	296	376	350
6	6		400	442	316	374	325
7	7	600		373	304	342	293.8
6	6		400	437	297	374	345.7
7	7	600		397	276	343	320.4
7	7	600		373	304	342	293.8
6	6		400	437	297	374	345.7
6	6		400	437	297	374	345.7
7	7	600		397	276	343	320.4
7	7	1350		360	272	320	282
6	6		400	437	297	374	345.7
5	5		1400	482	326	412	383.5
5	5		1900	498	321	418	395.5
5	5		1900	498	321	418	395.5
5	5		1900	498	321	418	395.5
3	3		6150	675	430	565	559
6	6		900	450	325	394	352
6	6		900	450	314	389	358
4	4		4150	573	411	500	461
5	4	1400		541	369	464	446
4	4		4150	562	379	480	466
4	4		4150	558	398	486	463
5	5		1900	488	321	413	369
5	5		1900	441	355	402	443
5	5		1900	488	321	413	369
5	5		1900	441	355	402	443
5	5		1900	500	341	429	434
5	5		2650	530	330	440	427.3
5	5		2650	530	330	440	427.3
7	7	600		395	284	345	312
7	7	600		395	284	345	312
5	5		2650	499	350	432	419
2	2		8650	787	474	646	649
4	4		4150	590	364	488	466
2	2		8650	768	469	634	639
4	4		5150	638	370	517	510
2	2		8650	787	474	646	649
2	2		8650	768	469	634	639
1	1		16900	1050	599	847	885
2	2		10400	836	481	676	706
1	1		12150	902	547	742	771
3	3		6150	657	447	563	552

3	3		7400	734	511	633	635
3	3		6150	660	446	564	556
2	2		8650	768	452	625	681
8	7	2600		350	260	310	272
6	6	100		401	291	351	334.3
8	7	2600		361	248	310	281.3
6	6	2400		430	298	371	350.8
6	6	850		396	310	358	323.7
6	6	850		408	289	354	335.2
6	6		400	421	310	371	332
8	7	2600		361	248	310	281.3
6	6	2400		430	298	371	350.8
6	6	100		418	329	378	335.4
6	6	100		403	283	349	327.2
6	6	100		423	280	359	345.4
5	5		1900	507	334	429	419
5	5		2650	523	351	446	434
6	6	100		405	257	338	321
9	8	3100		336	243	294	259.8
9	8		3100	338	230	289	261.7
7	7	1350		374	286	334	315.6
7	7	1350		388	271	335	336.4
5	5		1400	459	331	401	372
7	7	1100		379	271	331	295
6	6	100		416	287	358	340.4
7	7	1100		372	280	331	300.9
9	8	3100		336	243	294	259.8
7	7	850		381	299	344	315
8	8	2100		361	262	316	307
7	7	600		403	272	344	333.9
9	8		3100	338	230	289	261.7
7	7	1350		374	286	334	315.6
7	7	1350		388	271	335	336.4
8	7	2850		348	256	307	270
9	8		3100	338	230	289	261.7
7	7	1350		374	286	334	315.6
7	7	1350		388	271	335	336.4
9	8	3100		331	240	290	268
9	8	3350		330	239	289	266
6	6	850		401	289	350	328.2
7	7	1350		430	273	359	339.6
6	6		900	449	319	391	372
6	6		900	435	350	397	344
5	5		1900	509	346	436	407
6	6		900	435	343	394	343.7



6	5	900	517	351	443	422
4	4	3400	520	391	462	416
5	5	1900	447	372	413	354

CO2-Hwy	CO2-Comb	CO2-City	CO2-Hwy	CO2-Comb	240V Char	120V Char	PHEV Total	City PHEV	Hwy PHEV
232	287.6	432	319	381					
171.2	219.9	336	243	294					
220	291.5	442	296	376					
239	286.3	442	316	374					
199.8	251.6	373.3	303.6	324.4					
218.7	288.6	436.9	296.8	373.9					
202.1	267.2	397.1	276.4	342.8					
199.8	251.6	373.3	303.6	324.4					
218.7	288.6	436.9	296.8	373.9					
218.7	288.6	436.9	296.8	373.9					
202.1	267.2	397.1	276.4	342.8					
189	240	360	272	320					
218.7	288.6	436.9	296.8	373.9					
233	315.8	481.7	326	411.6					
238.7	323.9	498	320.9	418.4					
238.7	323.9	498	320.9	418.4					
238.7	323.9	498	320.9	418.4					
346	463.2	675	430	564.8					
238	300.7	444	333	394					
230	300.4	449.6	314.3	388.7					
296	387	573	412	501					
260	362.3	541	369	464					
296	389.5	562	379	480					
307	392.8	558	398	486					
248	329.4	488	321	412.9					
266	242.9	440.6	355	402.1					
248	329.4	488	321	412.9					
266	242.9	440.6	355	402.1					
260	355.7	500	341	428.5					
251.6	348.3	530.4	329.7	439.5					
251.6	348.3	530.4	329.7	439.5					
210	266	395	284	344.6					
210	266	395	284	344.6					
259	347	498.9	350.4	432.1					
361	519.4	787	474	646					
265	375.6	590	364	488.3					
359	513	768	469	634					
288	410.1	638	370	517.4					
361	519.4	787	474	646					
359	513	768	469	634					
495	709.5	1050.2	598.8	847.1					
353	547.2	836	481	676.3					
418	612.2	902	547	742					
349	460.7	657	447	563					

370	515.8	734	511	633
348	462.4	660	446	564
391	550.5	768	452	625
184	232.4	350	260	310
211.2	278.9	401	290.6	351.3
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.7
227.6	280.5	396.3	310.3	358.2
207.6	277.8	407.6	288.8	354.1
220.9	282	421	310	371
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.7
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
200.9	290.4	422.9	279.9	358.6
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	405	257	338
171.2	219.9	336	243	294
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
240	312.6	459	331	401
203	254	379	271	331
215.5	284.2	415.9	287	357.9
198.4	254.8	372	280.4	330.6
171.2	219.9	336	243	294
214	269.6	381.3	298.8	344.2
192	255.3	360.5	262	316.2
197.2	272.4	403.3	271.8	344.3
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
181	230	348	256	307
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.3
206.8	279.9	429.9	273.1	359.3
238	311.7	449	319	391
251	302	435	350	397
248	335.5	509	346	436
246.1	299.8	435	343	394

248	343.7	517	351	443
281	355.3	520.1	390.6	461.8
267	314.9	447	372	413



Comb PHE	MDPV? or Adj Comb Vol Higher	Final Label	EPA calcul	Error? (EP/EPA_FUEL_EPA_GHG_EPA_INCR
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N	4.2	4.2	4.2	0
N	2.9	2.9	2.9	0
N	4.2	4.2	4.2	0
N	4.2	4.2	4.2	0
N	3.8	3.8	3.8	0
N	4.2	4.2	4.2	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	4.2	4.2	4.2	0
N	4.2	4.2	4.2	0
N	3.8	3.8	3.8	0
N	3.6	3.6	3.6	0
N	4.2	4.2	4.2	0
N	4.5	4.5	4.5	0
N	4.8	4.8	4.8	0
N	4.8	4.8	4.8	0
N	4.8	4.8	4.8	0
N	6.2	6.2	6.2	0
N	4.3	4.3	4.3	0
N	4.3	4.3	4.3	0
N	5.6	5.6	5.6	0
N	4.5	4.5	4.5	0
N	5.6	5.6	5.6	0
N	5.6	5.6	5.6	0
N	4.8	4.8	4.8	0
N	5	5	5	0
N	4.8	4.8	4.8	0
N	5	5	5	0
N	4.8	4.8	4.8	0
N	5	5	5	0
N	5	5	5	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	5	5	5	0
N	7.1	7.1	7.1	0
N	5.6	5.6	5.6	0
N	7.1	7.1	7.1	0
N	5.9	5.9	5.9	0
N	7.1	7.1	7.1	0
N	7.1	7.1	7.1	0
N	10	10	10	0
N	7.7	7.7	7.7	0
N	8.3	8.3	8.3	0
N	6.2	6.2	6.2	0

N	6.7	6.7	6.7	0
N	6.2	6.2	6.2	0
N	7.1	7.1	7.1	0
N	3.1	3.1	3.1	0
N	4	4	4	0
N	3.1	3.1	3.1	0
N	4.2	4.2	4.2	0
N	4	4	4	0
N	4	4	4	0
N	4.2	4.2	4.2	0
N	3.1	3.1	3.1	0
N	4.2	4.2	4.2	0
N	4.3	4.3	4.3	0
N	4	4	4	0
N	4	4	4	0
N	4.8	4.8	4.8	0
N	5	5	5	0
N	4	4	4	0
N	2.9	2.9	2.9	0
N	2.9	2.9	2.9	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	4.5	4.5	4.5	0
N	3.7	3.7	3.7	0
N	4	4	4	0
N	3.7	3.7	3.7	0
N	2.9	2.9	2.9	0
N	4	4	4	0
N	3.6	3.6	3.6	0
N	3.8	3.8	3.8	0
N	2.9	2.9	2.9	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	3	3	3	0
N	2.9	2.9	2.9	0
N	3.8	3.8	3.8	0
N	3.8	3.8	3.8	0
N	2.9	2.9	2.9	0
N	2.9	2.9	2.9	0
N	4	4	4	0
N	3.8	3.8	3.8	0
N	4.3	4.3	4.3	0
N	4.3	4.3	4.3	0
N	4.8	4.8	4.8	0
N	4.3	4.3	4.3	0

N	4.3	4.3	4.3	0
N	5.3	5.3	5.3	0
N	4.8	4.8	4.8	0

MFR\_EPA\_EPA\_CALC\_EPA\_CALC\_EPA\_RND\_EPA\_RND\_EPA\_RND\_EPA\_RND\_EPA\_UNR[EPA\_UNR[EPA\_UNR





## EPA\_UNR|EPA\_UNR|EPA\_UNR|EPA\_ADJ|EPA\_PHEV|Label Submitter

[illegible]

[illegible]



Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.

**To:** "Hopson, Janet L." [hopsonjl@ornl.gov]; avid Good/AA/USEPA/US@EPA[]  
**Cc:** "Gibson, Robert C." [gibsonrc@ornl.gov]; oberts French/AA/USEPA/US@EPA;"Li, Jia" [lij1@ornl.gov]; Li, Jia" [lij1@ornl.gov]  
**From:** Ex. 7  
**Sent:** Fri 7/20/2012 10:15:26 AM  
**Subject:** RE: Bentley Flexible Fueled Models and Driving Range  
VW MY13 Fuel Tank Capacities.xlsx  
VW MY13 Fuel Tank Capacities.pdf  
[mailto:Good.David@epamail.epa.gov]  
Ex. 7 @vw.com  
Ex. 7 @vw.com  
Ex. 7

Hello Janet;

We are happy to provide the fuel tank volumes for our Volkswagen models, please see the attached listing. If there is anything else you need for the Volkswagen Group brands please let me know.

Best regards,

Ex. 7

Ex. 7

From: Hopson, Janet L. [mailto:hopsonjl@ornl.gov]  
Sent: Thursday, July 19, 2012 7:58 AM  
To: David Good  
Cc: Gibson, Robert C.; Ex. 7; Roberts French; Li, Jia  
Subject: RE: Bentley Flexible Fueled Models and Driving Range

Dave, Richard:

As you know the tank size is not from the EPA dataset, but something we add here at ORNL. Generally we use a dataset provided by Edmunds. If we don't find it in the Edmunds data we look it up on the manufacture's Web site. Since that is a manual process it can take a while for us to gather the information for each new model year. We're always happy to take data straight from the manufacturer so will use the value provided by Richard below for the Bentleys. We'd also be happy to add data for the VWs if Richard would like to provide it.

As to how we calculate miles on a tank... We have always calculated the miles on a tank for gasoline, diesel, E85, etc. by assuming you will refuel when there is 10% of the fuel left in the tank so our value has never matched the official EPA range for alternative fuel vehicles. I think this is on the agenda for next week's call.

Thanks,

Janet

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Wednesday, July 18, 2012 5:46 PM  
To: Hopson, Janet L.  
Cc: Gibson, Robert C.; [Ex. 7]@vw.com; Roberts French  
Subject: Fw: Bentley Flexible Fueled Models and Driving Range

Janet,

VW was wondering about the "miles on a tankful" information on the website.

Please advise---when you get a chance, especially about the VW models.

I'm thinking that very few Bentley customers are interested in the fuel economy (or miles on a tankful)---but the press use the site for background information (which eventually gets out to the public). It's probably a different story for VW customers.

Dave

----- Forwarded by David Good/AA/USEPA/US on 07/18/2012 05:38 PM -----

From: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
To: David Good/AA/USEPA/US@EPA  
Cc: [Ex. 7]@vw.com>

Date: 07/18/2012 12:16 PM  
Subject: Bentley Flexible Fueled Models and Driving Range

Hi Dave;

As we discussed on the phone, the miles on a tank values were missing on the fuel economy guide web site for the four 6.0L Bentley flexible fueled (E85) Continental models. They are the Continental GT, Continental GTC, Continental Flying Spur and the Continental Supersports Convertible. The fuel tank volume for these models is 23.8 US gallons. I understand from our discussion that the miles on a tank is not the same value we calculate per the requirements and that must appear on the fuel economy label for each of the fuels (gasoline and E85) on a flexible fueled model.

I noticed that many of the Audi gasoline and Diesel fueled models have a value for the "miles on a tank", however none of the Volkswagen models have this listed. If possible, we would like to see the "miles on a tank" on these high volume, fuel efficient Volkswagen models as well.

Thanks,  
Richard  
[attachment "winmail.dat" deleted by David Good/AA/USEPA/US]

<b><u>Carline</u></b>	<b><u>Engine (L)</u></b>	<b><u>Tank Volume (gal)</u></b>
Beetle	2.5	14.5
Beetle	2.0	14.5
Beetle (TDI)	2.0 TDI	14.5
CC	2.0	18.5
CC	3.6	18.5
CC 4Motion	3.6	18.5
Eos	2.0	14.5
Golf	2.5	14.5
Golf TDI	2.0 TDI	14.5
Golf R	2.0	14.5
GTI	2.0	14.5
GLI	2.0	14.5
Jetta	2.5	14.5
Jetta	2.0 TDI	14.5
Jetta SportWagen	2.5	14.5
Jetta SportWagen	2.0 TDI	14.5
Passat	2.5	18.5
Passat	3.6	18.5
Passat (TDI)	2.0 TDI	18.5
Routan	3.6	20.5
Tiguan	2.0L	16.8
Touareg	3.6	26.4
Touareg	3.0 TDI	26.4
Touareg Hybrid	3.0	26.4

source: [www.vw.com](http://www.vw.com)

**To:** pierre.bonnel@jrc.ec.europa.eu[pierre.bonnel@jrc.ec.europa.eu]; yron  
Bunker/AA/USEPA/US@EPA;[william.coleman@volkswagen.de];  
william.coleman@volkswagen.de>[]  
**Cc:** anup@theicct.org[anup@theicct.org]  
**From:** EFV Conference 2012  
**Sent:** Wed 7/25/2012 4:31:57 PM  
**Subject:** EFV Conference - Realizing World Emission Reductions - New Approaches Panel  
EFV Speaker Welcome\_072312\_1045\_6\_Sept 12.pdf

All –

Attached please find a speaker welcome packet for the EFV Conference, September 10-12, 2012. This includes instructions for registering and preparing travel logistics, as well as some requirements and deadlines for submitting materials to the Conference organizers. Please review and contact Nicole Henderson if you have any questions.

Thanks,

The EFV 2012 Planning Team



**September 10-12, 2012**  
**Baltimore Convention Center, Baltimore, MD, United States**  
**Session Speaker/Panelist Guide**

**Welcome and Thank You!**

We look forward to your participation at the 5<sup>th</sup> International Environmentally Friendly Vehicle Conference in Baltimore, MD. The following guidelines will assist you in preparing for your session.

**Event & Session Objectives**

Hosted in the United States for the first time, the fifth summit of the International Environmentally Friendly Vehicle Conference offers a unique opportunity to showcase progress and innovation in transportation. This conference will bring together industry leaders and representatives from around the world to share the latest innovations and experience on how to shape the market for clean and fuel efficient vehicles. Associated with the United Nations, the results of the conference will be used to continue an international dialogue on harmonization of global standards for and promotion of advanced vehicle technologies.

The primary objectives of the three-day event are to:

- Hear from industry leaders and representatives from around the world on how to shape the market for clean and fuel efficient vehicles.
- Showcase progress and innovation in transportation through opportunities like the exhibit hall and Ride and Drive event.
- Help chart the future of clean and fuel efficient vehicles by collaborating with industry, government and environmental organizations.

***Session Summary:*** The program agenda provides an important forum for industry, government and world leaders to discuss common ground and learn more about the technologies, programs and policies that focus on working together for cleaner and more fuel efficient vehicles. Your session **Realizing World Emission Reductions – New Approaches** is scheduled for 10:45AM – 12:25PM on Wednesday, September 12, 2012. Your session room will be identified closer to the conference. Your moderator, Dr. Anup Bandivadekar, will be in touch to provide additional information specific to your session topic and objectives.

Based on feedback from similar events, event organizers encourage speakers to focus their information and discussion points on "how" a project succeeded in addition to "what" happened with a specific project. Our goal is for attendees to leave with a better understanding of ways to implement ideas from your experiences into their projects; this can only happen if information is provided in a practical "how-to" fashion.

## Requirements & Deadlines

Requirement	Instructions	Deadline
Pre-register for event	Login to <a href="http://www.efv2012.com">www.efv2012.com</a> . Select the Presenter or Moderator   registrant type. <i>(Please note registration is complimentary for moderators/presenters.)</i>	August 21, 2012
Make travel arrangements	Travel and accommodation information can be found on the event website: <a href="http://www.regonline.com/builder/site/tab1.aspx?EventID=998283">http://www.regonline.com/builder/site/tab1.aspx?EventID=998283</a> .	Special conference rates at the hotel end on August 21.
Plan and discuss your session presentation with your session moderator	Your moderator will contact you to schedule the first planning call for your session.	August 6, 2012
Submit any PowerPoint slides or other presentation files*	Email to <a href="mailto:efvconference2012@sra.com">efvconference2012@sra.com</a> . Contact Nicole Henderson at SRA (724-746-3924) if you have questions about submitting your files. Additional information about the use of audio visuals is provided below.	August 20, 2012
Provide a one paragraph biographical summary	Email to <a href="mailto:efvconference2012@sra.com">efvconference2012@sra.com</a> . A biography template is provided below. Bios may be edited to accommodate space limitations on the website or in the program guide.	August 20, 2012
Submit your audio visual equipment needs	Email to <a href="mailto:efvconference2012@sra.com">efvconference2012@sra.com</a> . Additional information about audio visuals is provided below.	<b>August 20, 2012</b>
Provide a backup file of your presentation at the event	Bring a backup file of your presentation, including any final changes you may have made, on a USB flash drive or CD-ROM and provide that to event organizers when you check-in. A separate registration table for presenters will be provided.	September 10-12, 2012

\* Submission of your biography and presentation materials constitutes your permission to post the materials (as PDF protected files) on the event website and use them in other outreach materials for the event (e.g., conference program). Please email [efvconference2012@sra.com](mailto:efvconference2012@sra.com) if you have any questions or if you decline permission to post the materials.



### ***Audio Visual Information:***

- Presenters will have access to a podium lectern with microphone, a projector, a Windows XP PC laptop with CD-ROM drive running Microsoft Office 2010, and a projection screen in each session room.
- Each room will have at least three (3) tabletop microphones and one (1) wireless lavalier microphone.
- If you have special audiovisual needs beyond those listed, please contact SRA ([efvconference2012@sra.com](mailto:efvconference2012@sra.com)) no later than **Monday, August 20, 2012**, and we will try to accommodate the request. Requests made after this deadline may not be considered.
- Presentation materials will be loaded to the laptop assigned to your session room. We request that you send an electronic copy of your presentation files to [efvconference2012@sra.com](mailto:efvconference2012@sra.com) by **Monday, August 20, 2012** and also submit electronic files at registration check-in, so it may be copied for pre-loading and testing on the laptop prior to your scheduled presentation.
- Note that Apple Mac format files cannot be supported. Mac files must be converted to PC format and tested prior to your arrival at the event.
- For best results, use only standard PC system fonts when creating your presentation slides. If you must use a custom font, make sure the font is embedded into your file when you save it.
- Photos, graphics, and video clips in your presentation create a more visually interesting experience for your audience. Make sure any high resolution photos or graphics are imported into your slide files are properly scaled down and formatted for computer screen resolution (recommended max size 960x720 pixels at 96 dpi).
- To minimize the size of your files, insert all images as pictures. To do this, right click on one picture, choose "format picture," choose "compress," choose compress "all pictures in document," and compress to "web/screen" at 96 dpi.
- If your presentation is more than 20MB, contact SRA at [efvconference2012@sra.com](mailto:efvconference2012@sra.com), and they will provide directions on how to send it through the SRA FTP site.
- Internet access is very limited in the session rooms. You are strongly encouraged to run web files locally (i.e., from a CD-ROM, flash drive or local computer hard drive).
- We are promoting a green event, and EPA has limited ability to print any handouts. However, if you would like to provide participants with handouts, please bring approximately 300 copies for plenary sessions and 100 copies for breakout sessions, preferably double-sided. Please contact SRA at [efvconference2012@sra.com](mailto:efvconference2012@sra.com) if you want to ship any handout materials in advance. We request all materials are received by **August 31, 2012**.
- We will have a speaker ready room available at the Baltimore Convention Center for final preparations and coordinating with other session members. No AV equipment will be provided and conference organizers will not be able to print materials for you onsite.

### **Biography Template**

Please use this basic template for your speaker biography. Send to [efvconference2012@sra.com](mailto:efvconference2012@sra.com) by **Monday, August 20, 2012**.

**Lily Swamp**, *Chief, Environmentally Friendly Vehicle Branch, U.S. EPA.*

202-555-1234, [swamp.lily@epa.gov](mailto:swamp.lily@epa.gov), Washington, DC

Ms. Swamp is Chief of the Environmentally Friendly Vehicle Branch in the Climate Protection Partnerships Division of the U.S. Environmental Protection Agency. She manages three of EPA's major voluntary vehicle programs that engage a range of companies, municipalities, universities and other organizations in reducing vehicle emissions. Formerly, Ms. Swamp headed EPA's international climate change capacity building efforts in high-emitting developing countries such as China and India. She spent the first portion of her 15 years in federal service as a foreign affairs officer at the U.S. Department of State, working on climate change issues. Ms. Swamp also served as a member of the U.S. delegation to the international climate change negotiations from 1995 to 2008. She holds a B.A. in Political Science from Florida College and an MPA from the School of Lily Pads, Main Street University.

### **Contact Information**

For any additional questions, please contact [efvconference2012@sra.com](mailto:efvconference2012@sra.com) or call Nicole Henderson at (724) 746-3924.

### **Tips**

#### ***Speaker/Presenter***

- Plan and develop the content, structure and style of your presentation to address the targeted topic, encourage questions/invite participation, and fit presentation within your time allocation.
- Present the information in an engaging and interactive manner—start off with an energetic hook, ask questions, poll the audience, use visuals, reference real-world anecdotes, relax, be yourself and have fun.
- Focus the information to share "how" your project succeeded—e.g., what barriers did you face, at what stage in the process did the issue(s) arise, who played what role in overcoming the barriers, what creative techniques/approaches/partners did you use? Specifically identify how the solutions you used and what you experienced might be transferrable to other stakeholders.
- Stick to allotted time—be on time.

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** Stephen Healy/AA/USEPA/US@EPA;"Giles, Michael (EEO)"  
[michael.giles@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 7/26/2012 2:57:49 PM  
**Subject:** VW Group - Certificate Request for 2013 Audi Q5 Hybrid

Hello Jim,

We have submitted a Certificate Request for Audi test group DADXT02.0HUB, Audi Q5 Hybrid. The Initial Application and required manufacturer confirmatory tests have been submitted to Verify. Please review and process a Certificate of Conformity by August 3rd if possible. You can contact me directly if there are any questions about these submissions.

Best regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Fri 7/27/2012 12:45:08 PM  
**Subject:** 2013 FE Guide - data as of 7/26/2012 attached  
VW Group 2013 FEGuide--all rel dates-no-sales-7-26-2012.xlsx

Richard,

Please take a look at the errors that our macro flagged. Let me know if you think any of them should not have been flagged.

Thanks

EPA comr	VERIFY cc	Model Yr (Mfr Name	Division (ICarline	Verify Mfr Index (Mo	Eng Displ # Cyl	
Error in coiY		2013Audi	Audi	A3 ADX	59	2.0 4
Error in coiY		2013Audi	Audi	A3 ADX	73	2.0 4
Error in coiY		2013Audi	Audi	A3 ADX	58	2.0 4
Error in coiY		2013Audi	Audi	A3 quattro ADX	60	2.0 4
Error-- unrY		2013Audi	Audi	A4 ADX	35	2.0 4
		2013Audi	Audi	A4 quattroADX	37	2.0 4
		2013Audi	Audi	A4 quattroADX	40	2.0 4
Error-- unrY		2013Audi	Audi	A5 CabrioADX	36	2.0 4
		2013Audi	Audi	A5 CabrioADX	39	2.0 4
		2013Audi	Audi	A5 quattroADX	38	2.0 4
		2013Audi	Audi	A5 quattroADX	41	2.0 4
Error in coiY		2013Audi	Audi	A6 ADX	65	2.0 4
		2013Audi	Audi	A6 quattroADX	70	2.0 4
		2013Audi	Audi	A6 quattroADX	77	3.0 6
Error in coiY		2013Audi	Audi	A7 quattro ADX	76	3.0 6
Error in coiY		2013Audi	Audi	A8 ADX	128	3.0 6
Error in coiY		2013Audi	Audi	A8L ADX	129	3.0 6
		2013Audi	Audi	A8L ADX	109	6.3 12
Error-- unrY		2013Audi	Audi	allroad queADX	134	2.0 4
		2013Audi	Audi	Q5 ADX	91	2.0 4
Error-- unrY		2013Audi	Audi	Q7 ADX	61	3.0 6
Error in coiY		2013Audi	Audi	Q7 ADX	53	3.0 6
Error in coiY		2013Audi	Audi	RS5 ADX	49	4.2 8
		2013Audi	Audi	RS5 CabrioADX	52	4.2 8
Error in coiY		2013Audi	Audi	S4 ADX	42	3.0 6
Error in coiY		2013Audi	Audi	S4 ADX	45	3.0 6
Error in coiY		2013Audi	Audi	S5 ADX	43	3.0 6
Error in coiY		2013Audi	Audi	S5 ADX	46	3.0 6
Error-- unrY		2013Audi	Audi	S5 CabrioADX	44	3.0 6
Error in coiY		2013Audi	Audi	S6 ADX	48	4.0 8
Error in coiY		2013Audi	Audi	S7 ADX	47	4.0 8
Error in coiY		2013Audi	Audi	TT Coupe ADX	66	2.0 4
Error in coiY		2013Audi	Audi	TT RoadstADX	67	2.0 4
		2013Audi	Audi	TTRS CoupADX	69	2.5 5
Error in coiY		2013Bentley	Bentley Mc	ContinentaBEX	110	6.0 12
		2013Bentley	Bentley Mc	ContinentaBEX	108	4.0 8
Error in coiY		2013Bentley	Bentley Mc	ContinentaBEX	113	6.0 12
		2013Bentley	Bentley Mc	ContinentaBEX	107	4.0 8
Error in coiY		2013Bentley	Bentley Mc	ContinentaBEX	111	6.0 12
Error in coiY		2013Bentley	Bentley Mc	ContinentaBEX	112	6.0 12
		2013Bugatti	Bugatti	Veyron BGT	88	8.0 16
Error in coiY		2013Lamborghini	Lamborghini	Aventador NLX	92	6.5 12
Error in coiY		2013Lamborghini	Lamborghini	Aventador NLX	93	6.5 12
Error in coiY		2013Lamborghini	Lamborghini	Gallardo CNLX	30	5.2 10
Error in coiY		2013Lamborghini	Lamborghini	Gallardo CNLX	32	5.2 10
Error in coiY		2013Lamborghini	Lamborghini	Gallardo SNLX	31	5.2 10
Error in coiY		2013Lamborghini	Lamborghini	Gallardo SNLX	33	5.2 10
Error in coiY		2013Volkswage	Volkswage	BEETLE VWX	94	2.0 4

	2013 Volkswagen	Volkswagen	BEETLE	VWX	19	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	BEETLE	VWX	84	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	BEETLE	VWX	89	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	BEETLE	VWX	17	2.5	5
	2013 Volkswagen	Volkswagen	BEETLE	VWX	27	2.5	5
	2013 Volkswagen	Volkswagen	BEETLE COV	VWX	20	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	BEETLE COV	VWX	85	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	BEETLE CV	VWX	90	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	BEETLE CV	VWX	18	2.5	5
	2013 Volkswagen	Volkswagen	CC	VWX	1	2.0	4
	2013 Volkswagen	Volkswagen	CC	VWX	4	2.0	4
	2013 Volkswagen	Volkswagen	CC	VWX	2	3.6	6
	2013 Volkswagen	Volkswagen	CC 4MOTION	VWX	3	3.6	6
Error in colY	2013 Volkswagen	Volkswagen	Eos	VWX	21	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	GOLF	VWX	72	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	GOLF	VWX	81	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	GOLF	VWX	16	2.5	5
Error in colY	2013 Volkswagen	Volkswagen	GOLF	VWX	26	2.5	5
Error in colY	2013 Volkswagen	Volkswagen	Golf R	VWX	57	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	GTI	VWX	22	2.0	4
	2013 Volkswagen	Volkswagen	GTI	VWX	23	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	Jetta	VWX	50	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	Jetta	VWX	71	2.0	4
Error: FE 1Y	2013 Volkswagen	Volkswagen	Jetta	VWX	86	2.0	4
Error-- unriY	2013 Volkswagen	Volkswagen	Jetta	VWX	87	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	Jetta	VWX	51	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	Jetta	VWX	80	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	Jetta	VWX	15	2.5	5
Error in colY	2013 Volkswagen	Volkswagen	Jetta	VWX	25	2.5	5
Error in colY	2013 Volkswagen	Volkswagen	JETTA SP	VWX	74	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	JETTA SP	VWX	79	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	JETTA SP	VWX	14	2.5	5
Error in colY	2013 Volkswagen	Volkswagen	JETTA SP	VWX	24	2.5	5
Diesel;	2013 Volkswagen	Volkswagen	Passat	VWX	62	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	Passat	VWX	64	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	Passat	VWX	83	2.5	5
Error in colY	2013 Volkswagen	Volkswagen	Passat	VWX	82	2.5	5
Error in colY	2013 Volkswagen	Volkswagen	Passat	VWX	63	3.6	6
Error-- unriY	2013 Volkswagen	Volkswagen	TIGUAN	VWX	68	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	TIGUAN	VWX	56	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	TIGUAN 4I	VWX	55	2.0	4
Error in colY	2013 Volkswagen	Volkswagen	TOUAREG	VWX	54	3.0	6
Error in colY	2013 Volkswagen	Volkswagen	TOUAREG	VWX	78	3.6	6
Error in colY	2013 Volkswagen	Volkswagen	Touareg H	VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	21	28	24			26.6	38.2	30.8102
Auto(AM-S	30	42	34			39.0935	59.3437	46.1856
Manual(M	21	30	24			25.3	40.3	30.3902
Auto(AM-S	21	28	24			27.2	37.1	30.9119
Auto(Ple	Please revise	Verify as needed.	26			30.1185	44.4328	35.2251
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Manual(M	22	32	26			27.624	43.9699	33.1736
Auto(Ple	Please revise	Verify as needed.	26			30.1185	44.4328	35.2251
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Manual(M	22	32	26			27.624	43.9699	33.1736
Auto(AV-S	25	33	28			31.4	46.9	36.8857
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Auto(S8)	18	27	22			23.1369	38.1	28.1037
Auto(S8)	18	28	21			22.5575	37.3745	27.4556
Auto(S8)	18	28	21			22.5575	37.3745	27.4556
Auto(S8)	18	28	21			22.5575	37.3745	27.4556
Auto(S8)	13	21	16			15.9	25.7	19.1935
Auto(S8)	Please revise	Verify as needed.	27			25.2	37.3	29.5075
Auto(S8)	20	28	23			24.8	35.9	28.8083
Auto(S8)	Please revise	Verify as needed.	18			19.2813	29.852	22.9361
Auto(S8)	19	28	22			22.8	39.1	28.0649
Auto(AM-S	16	23	18			19.1	30	22.8332
Auto(AM-S	16	22	18			19.2	28.9	22.6159
Auto(AM-S	18	28	21			22.4	35.8	26.9372
Manual(M	17	26	20			20	33.4	23.4887
Auto(AM-S	18	28	21			22.4	35.8	26.9372
Manual(M	17	26	20			20	33.4	23.4887
Auto(Ple	Please revise	Verify as needed.	21			22.1	34.7	26.4165
Auto(AM-S	17	27	20			20.7539	35.335	25.4866
Auto(AM-S	17	27	20			20.7539	35.335	25.4866
Auto(AM-S	22	31	26			28.4068	42.2579	33.3217
Auto(AM-S	22	31	26			28.4068	42.2579	33.3217
Manual(M	18	25	20			21.2	34.2	25.5746
Auto(S6)	11	19	14			13.7	24.6	17.112
Auto(S8)	15	24	18			19	33.5	23.5959
Auto(S6)	12	19	14			13.9	24.7	17.3049
Auto(S8)	14	24	17			17.4	30.8	21.6358
Auto(S6)	Verify as needed.	11	19	14		13.7	24.6	17.112
Auto(S6)	12	19	14			13.9	24.7	17.3049
Auto(AM-S	8	15	10			10	17.9	12.4782
Auto(AM-S	11	18	13			12.6	25.2	16.2581
Auto(AM-S	10	16	12			11.5	21.2	14.4817
Auto(AM-S	13	20	16			16.1	25.4	19.276
Manual(M	12	20	15			14	24	17.2308
Auto(AM-S	13	20	16			16	25.4	19.197
Manual(M	12	20	14			13	22.6	16.0722
Auto(AM-S	29	39	32			37.3	55.3	43.7011

Auto(AM-S	22	30	25	26.5	42.0656	31.7942
Manual(M	28	41	32	36.066	57.9978	43.4617
Manual(M	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
Manual(M	28	41	32	36.066	57.9978	43.4617
Manual(M	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.2701
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Manual(M	19	27	22	23.9	37.1	28.456
Auto(AM-S	24	33	27	29.9333	43.5096	34.8229
Manual(M	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	22	29	25	28.1	41.499	32.8768
Manual(M	24	34	28	28.8	46.2	34.6771
Manual(M	22	33	26	26.5556	44.9945	32.56
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	29	39	33	37.6	56.2	44.1798
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

Adjusted combined FE values. Please revise Verify as needed.

Manual(M) Verify as needed.

Auto(S6) Please revise Verify as needed.



City	Highway	Unrd	Comb	Unr	Guzzler?	Air Aspir	IAir Aspir	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbochar	AMS	Automated			6
29.8946	41.5209	34.2046			TC	Turbochar	AMS	Automated			6
20.8146	29.9953	24.1394			TC	Turbochar	M	Manual			6
20.891	28.1035	23.6187			TC	Turbochar	AMS	Automated			6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual			6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual			6
24.5044	32.5529	27.5721			TC	Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
18.3949	27.2332	21.5408			SC	Superchar	SA	Semi-Auto			8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto			8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto			8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto			8
13.1387	20.6025	15.6978	G		NA	Naturally	SA	Semi-Auto			8
19.9584	26.6824	22.5112			TC	Turbochar	SA	Semi-Auto			8
19.7289	28.2351	22.823			TC	Turbochar	SA	Semi-Auto			8
15.522	21.5458	17.7559			SC	Superchar	SA	Semi-Auto			8
18.74	27.62	21.9099			TC	Turbochar	SA	Semi-Auto			8
15.7409	23.3075	18.4339			NA	Naturally	AAMS	Automated			7
15.8793	22.1836	18.2078			NA	Naturally	AAMS	Automated			7
18.117	27.558	21.419			SC	Superchar	AMS	Automated			7
17.0438	26.023	20.1767			SC	Superchar	M	Manual			6
18.117	27.558	21.419			SC	Superchar	AMS	Automated			7
17.0438	26.023	20.1767			SC	Superchar	M	Manual			6
17.6699	25.953	20.6333			SC	Superchar	AMS	Automated			7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automated			7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automated			7
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automated			6
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automated			6
17.751	25.2021	20.4751			TC	Turbochar	M	Manual			6
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto			6
15.0109	24.4645	18.1706			TC	Turbochar	SA	Semi-Auto			8
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto			6
14.0639	23.9773	17.2766	G		TC	Turbochar	SA	Semi-Auto			8
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto			6
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto			6
8.4232	14.7698	10.4424	G		TC	Turbochar	AMS	Automated			7
10.6055	18.4729	13.1199	G		NA	Naturally	AAMS	Automated			7
9.7957	16.2453	11.9264	G		NA	Naturally	AAMS	Automated			7
13.4655	19.7573	15.718	G		NA	Naturally	AAMS	Automated			6
12.0883	19.9831	14.7021	G		NA	Naturally	AM	Manual			6
13.3954	19.7741	15.6701	G		NA	Naturally	AAMS	Automated			6
11.5388	19.5451	14.1465	G		NA	Naturally	AM	Manual			6
28.6469	38.87	32.4925			TC	Turbochar	AMS	Automated			6

22.0202	29.5574	24.8746	TC	TurbocharçAMS	Automated	6
27.8088	40.6616	32.4203	TC	TurbocharçM	Manual	6
20.5408	29.7034	23.8517	TC	TurbocharçM	Manual	6
22.2864	28.5683	24.7338	NA	Naturally ASA	Semi-Auto	6
21.7201	30.6767	25.0054	NA	Naturally çM	Manual	5
21.1383	28.6751	23.9738	TC	TurbocharçAMS	Automated	6
27.8088	40.6616	32.4203	TC	TurbocharçM	Manual	6
20.5408	29.7034	23.8517	TC	TurbocharçM	Manual	6
21.2302	26.9749	23.4804	NA	Naturally ASA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	TurbocharçAMS	Automated	6
20.8232	31.7255	24.6324	TC	TurbocharçM	Manual	6
17.4935	26.5716	20.6716	NA	Naturally çSA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally çSA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	TurbocharçAMS	Automated	6
29.8946	41.5209	34.2046	TC	TurbocharçAMS	Automated	6
29.6183	41.8508	34.104	TC	TurbocharçM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally çM	Manual	5
19.278	26.8882	22.0917	TC	TurbocharçM	Manual	6
24.2237	32.5108	27.3624	TC	TurbocharçAMS	Automated	6
21.2839	30.8324	24.7304	TC	TurbocharçM	Manual	6
23.7854	31.6043	26.7652	TC	TurbocharçAMS	Automated	6
29.8946	41.5209	34.2046	TC	TurbocharçAMS	Automated	6
23.1009	29.1554	25.4822	NA	Naturally ASA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally çM	Manual	5
21.8931	32.6043	25.6912	TC	TurbocharçM	Manual	6
29.6183	41.8508	34.104	TC	TurbocharçM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally çM	Manual	5
28.8556	39.4682	32.8278	TC	TurbocharçAMS	Automated	6
29.6183	41.8508	34.104	TC	TurbocharçM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally çM	Manual	5
30.4633	40.2057	34.1916	TC	TurbocharçAMS	Automated	6
30.8024	42.6219	35.1943	TC	TurbocharçM	Manual	6
22.1078	30.6611	25.2814	NA	Naturally ASA	Semi-Auto	6
21.8993	32.1378	25.5642	NA	Naturally çM	Manual	5
19.7174	27.8048	22.6868	NA	Naturally çAMS	Automated	6
20.6233	26.0617	22.7606	TC	TurbocharçSA	Semi-Auto	6
18.1488	26.2617	21.0791	TC	TurbocharçM	Manual	6
20.402	25.8545	22.5412	TC	TurbocharçSA	Semi-Auto	6
19.649	28.9961	22.9829	TC	TurbocharçSA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally ASA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	SupercharçSA	Semi-Auto	8

Trans	Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Automated	Manual with paddles)	F	2-Wheel DD	ADXXV02.		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	2-Wheel DD	VWXXV02.0U5N			5	DU	Diesel, ultr	
N	N	F	2-Wheel DD	ADXXV02.		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXV02.		10		GP	Gasoline (I	
MT with paddles)		F	2-Wheel DD	ADXXV02.		10		GP	Gasoline (I	
Y	N	A	All Wheel ID	ADXXV02.(		10		GP	Gasoline (F	
N	N	A	All Wheel ID	ADXXV02.(		10		GP	Gasoline (F	
MT with paddles)		F	2-Wheel DD	ADXXV02.		10		GP	Gasoline (I	
Y	N	A	All Wheel ID	ADXXV02.(		10		GP	Gasoline (F	
Y	N	A	All Wheel ID	ADXXV02.(		10		GP	Gasoline (F	
N	N	A	All Wheel ID	ADXXV02.(		10		GP	Gasoline (F	
MT with paddles)		F	2-Wheel DD	ADXXV02.		10		GP	Gasoline (I	
Y	N	A	All Wheel ID	ADXXV02.(		10		GP	Gasoline (F	
Y	N	A	All Wheel ID	ADXXJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel ID	ADXXJ03.(		10		GP	Gasoline (I	
Y	N	A	All Wheel ID	ADXXJ03.(		10		GP	Gasoline (I	
Y	N	A	All Wheel ID	ADXXJ03.(		10		GP	Gasoline (I	
Y	N	A	All Wheel ID	VWXXV06.		10		GP	Gasoline (F	
Y	N	A	All Wheel ID	ADXXV02.		10		GP	Gasoline (I	
Y	N	A	All Wheel ID	ADXT02.(		10		GP	Gasoline (F	
Y	N	A	All Wheel ID	ADXT03.		10		GP	Gasoline (I	
Y	N	A	All Wheel ID	ADXT03.03UG			5	DU	Diesel, ultr	
Automated	Manual with paddles)	F	All Wheel ID	ADXXV04.		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXV04.(		10		GP	Gasoline (F	
Automated	Manual with paddles)	F	All Wheel ID	ADXXJ03.(		10		GP	Gasoline (I	
N	N	A	All Wheel ID	ADXXJ03.(		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXJ03.(		10		GP	Gasoline (I	
N	N	A	All Wheel ID	ADXXJ03.(		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXJ03.(		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXV04.		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXV04.		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXV02.		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXV02.		10		GP	Gasoline (I	
N	N	A	All Wheel ID	ADXXV02.(		10		GP	Gasoline (F	
Y	N	A	All Wheel ID	BEXV06.		85	333	GP	Gasoline (I	
Y	N	A	All Wheel ID	ADXXV04.(		10		GP	Gasoline (F	
Y	N	A	All Wheel ID	BEXV06.		85	333	GP	Gasoline (I	
Y	N	A	All Wheel ID	ADXXV04.(		10		GP	Gasoline (F	
Y	N	A	All Wheel ID	BEXV06.		85	333	GP	Gasoline (I	
Y	N	A	All Wheel ID	BEXV06.		85	333	GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	BGTV08.(		10		GPR	Gasoline (F	
Automated	Manual with paddles)	F	All Wheel ID	NLXV06.		10		GPR	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	NLXV06.		10		GPR	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXV05.		10		GP	Gasoline (I	
N	N	A	All Wheel ID	ADXXV05.		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	All Wheel ID	ADXXV05.		10		GP	Gasoline (I	
N	N	A	All Wheel ID	ADXXV05.		10		GP	Gasoline (I	
Automated	Manual with paddles)	F	2-Wheel DD	VWXXV02.0U5N			5	DU	Diesel, ultr	

Automated Manual with paddles)	2-Wheel DDVWXJ02.0	10	GP	Gasoline (F
N N F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
N N F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
Y N F	2-Wheel DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel DDVWXV02.	10	G	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXJ02.0	10	GP	Gasoline (F
N N F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
N N F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
Y N F	2-Wheel DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel DDVWXJ02.0	10	GP	Gasoline (F
N N F	2-Wheel DDVWXJ02.0	10	GP	Gasoline (F
Y N F	2-Wheel DDVWXV03.	10	GP	Gasoline (F
Y N A	All Wheel IDVWXV03.	10	GP	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXV02	10	GP	Gasoline (I
Automated Manual with paddles)	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
N N F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel DDVWXV02	10	G	Gasoline (I
N N A	All Wheel IDADXV02.	10	GP	Gasoline (I
Automated Manual with paddles)	2-Wheel DDADXV02.	10	GP	Gasoline (I
N N F	2-Wheel DDADXV02.0	10	GP	Gasoline (F
Automated Manual with paddles)	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
Automated Manual with paddles)	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
N N F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
N N F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel DDVWXV02.0U4S	5	DU	Diesel, ultr
N N F	2-Wheel DDVWXV02.0U4S	5	DU	Diesel, ultr
Y N F	2-Wheel DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel DDVWXV03	10	GP	Gasoline (I
Y N F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
N N F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
Y N A	All Wheel IDVWXJ02.	10	GP	Gasoline (I
Y N A	All Wheel IDADXT03.02UG	5	DU	Diesel, ultr
Y N A	All Wheel IDVWXT03	10	GP	Gasoline (I
Y N A	All Wheel IDVWXT03	10	GP	Gasoline (I



MPG (lead)	Recommended	Not exempt			85	15
MPC (15 ppm)	Maximum	Not exempt			85	15
MPC (lead)	Recommended	Not exempt			85	15
MPC (lead)	Recommended	Not exempt			85	15
MPC (lead)	Recommended	Not exempt			85	15
MPC (lead)	Recommended	Not exempt			81	7
MPC (15 ppm)	Maximum	Not exempt			81	7
MPC (lead)	Recommended	Not exempt			81	7
MPC (lead)	Recommended	Not exempt			81	7
MPC (lead)	Recommended	Not exempt			94	13
MPC (lead)	Recommended	Not exempt			94	13
MPC (lead)	Recommended	Not exempt			94	13
MPC (lead)	Recommended	Not exempt			94	13
MPC (lead)	Recommended	Not exempt			77	11
MPC (15 ppm)	Maximum	Not exempt			94	15
MPC (15 ppm)	Maximum	Not exempt			94	15
MPC (lead)	Recommended	Not exempt			94	15
MPC (lead)	Recommended	Not exempt			94	15
MPC (lead)	Recommended	Not exempt			94	15
MPC (lead)	Recommended	Not exempt			94	16
MPC (15 ppm)	Maximum	Not exempt			94	16
MPC (lead)	Recommended	Not exempt			94	16
MPC (lead)	Recommended	Not exempt			94	16
MPC (lead)	Recommended	Not exempt			94	16
MPC (15 ppm)	Maximum	Not exempt			94	16
MPC (lead)	Recommended	Not exempt			94	16
MPC (lead)	Recommended	Not exempt			94	16
MPC (15 ppm)	Maximum	Not exempt			92	33
MPC (15 ppm)	Maximum	Not exempt			92	33
MPC (lead)	Recommended	Not exempt			92	33
MPC (lead)	Recommended	Not exempt			92	33
MPC (15 ppm)	Maximum	Not exempt			102	16
MPC (15 ppm)	Maximum	Not exempt			102	16
MPC (lead)	Recommended	Not exempt			102	16
MPC (lead)	Recommended	Not exempt			102	16
MPC (lead)	Recommended	Truck				
MPC (lead)	Recommended	Truck				
MPC (lead)	Recommended	Truck				
MPC (15 ppm)	Maximum	Truck				
MPC (lead)	Recommended	Truck				
MPC (lead)	Recommended	Truck				

Annual Fuel Economy	EPA Calculated	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hwy Low'd CorCity2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide	
1700	1700		
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide	
2400	2400	reprocessed to pick up change to A3 quattro carline correction	
2200	2200	corrected forward speed to 8 on this CVT transmission	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and	
2200	2200		
2200	2200	corrected forward speeds to 8	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched	
2600	2600		
2700	2700		
2700	2700	added new A7 quattro data to the base level	
2700	2700	added new A7 quattro data to the base level	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG	
2500	2500		
3150	3150		
2600	2600		
3150	3150		
3150	3150	corrected city CO2 value, typo	
2700	2700		
2850	2850	corrected unrounded unadjusted city value	
2700	2700		
2850	2850	corrected city unrounded unadjusted value to 20.000 mpg	
2700	2700		
2850	2850		
2850	2850		
2200	2200		
2200	2200		
2850	2850		
4050	4050	8 13 10	9.5
3150	3150		
4050	4050	8 14 10	10.3
3350	3350		
4050	4050	8 13 10	9.5
4050	4050	8 14 10	10.3
5700	5700	corrected lock out to "yes" and AMS.	
4400	4400	lock up to YES.	
4750	4750	adjusted release date, lock up to YES.	
3550	3550	corrected fuel consumption per ASTM rounding procedure	
3800	3800		
3550	3550	corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure	
4050	4050		
1800	1800		

2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400
2150	2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g
2150	2150 corrected annual fuel cost, early label... update after Verify release 10
2400	2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400
2300	2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjusted
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre
2700	2700 update after Verify release 10
2850	2850 UPDATE after Verify release 10
2300	2300
1700	1700
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
2600	2600
2100	2100
2300	2300 early label, upate after Verify release 10
2100	2100
1700	1700
2150	2150 corrected fuel savings and ratings
1900	1900
2200	2200
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1750	1750
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1700	1700
1650	1650
2150	2150
2050	2050 CORRECTED 5 YEAR FUEL SAVINGS
2500	2500
2500	2500 corrected CO2 values
2700	2700
2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio
2500	2500
3000	3000
2700	2700



Highway Fuel Economy (City/Highway/Combined) Alternative Fuel  
 Highway Fuel Economy (City/Highway/Combined) Range2 - Fuel2 Use Fuel2 Use Fuel2 Unit Fuel2 Unit

gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
gallons per 100 value...these values were switched

sumption to 6.2 per ASTM rounding procedure

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E.MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E.MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E.MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E.MPG	miles per g

roup

o 29 MPG

MPG value  
nd corresponding 5-cycle values  
cted calculated values

Alternative Fuel					Description	Intake Val	Exhaust V	Carline CI	Carline CI
Fuel	2 Ann City	CO2 IHwy	CO2 Comb	CO2 Fuel					
4650	794	469	648	4650	SIDI;	2	27	Small Stati	
						2	27	Small Stati	
					SIDI;	2	27	Small Stati	
					SIDI;	2	27	Small Stati	
					SIDI;	2	24	Compact C	
					SIDI;	2	24	Compact C	
					SIDI;	2	24	Compact C	
					SIDI;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
					SIDI;	2	25	Midsize C	
					SIDI;	2	25	Midsize Ca	
					SIDI;	2	25	Midsize Ca	
					SIDI;	2	25	Midsize C	
					SIDI; Unde	2	25	Midsize C	
					SIDI; Unde	2	26	Large Cars	
					SIDI;	2	26	Large Cars	
					SIDI;	2	27	Small Stati	
					SIDI;	2	231	Small SUV 4WD	
					SIDI;	2	233	Standard SUV 4W	
						2	233	Standard SUV 4W	
					SIDI;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
					SIDI;	2	24	Compact C	
					SIDI;	2	24	Compact C	
					SIDI;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
					SIDI;	2	25	Midsize C	
					SIDI;	2	25	Midsize C	
					SIDI;	2	23	Subcompa	
SIDI;	2	21	Two Seate						
SIDI;	2	23	Subcompa						
FFV;	2	25	Midsize C						
SIDI;	2	24	Compact C						
FFV;	2	24	Compact C						
SIDI;	2	23	Subcompa						
FFV;	2	23	Subcompa						
FFV;	2	23	Subcompa						
	2	21	Two Seate						
	2	21	Two Seate						
	2	21	Two Seate						
SIDI;	2	21	Two Seate						
SIDI;	2	21	Two Seate						
SIDI;	2	21	Two Seate						
SIDI;	2	21	Two Seate						
	2	24	Compact C						

SIDI;	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	23	Subcompa
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	1	15	Midsize Ca
	1	15	Midsize Ca
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
SIDI;	2	25	Midsize Ca
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Vehicle Specific 5-cycle	6/11/2012	10148	N	N	
cars	Derived 5-cycle label	6/22/2012	10302	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	10147	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	10331	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10326	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10327	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	10328	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	10274	N	N	
car	economy/label specific 5-cycle	6/20/2012	10274	N	N	
car	economy/label specific 5-cycle	6/20/2012	10274	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
cars	Derived 5-cycle label	4/26/2012	10276	N	N	
	Vehicle Specific 5-cycle	7/11/2012	10540	N	N	
D	Derived 5-cycle label	6/11/2012	10150	N	N	
D	Vehicle Specific 5-cycle	7/11/2012	10203	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	10077	N	N	
car	Vehicle Specific 5-cycle	7/11/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9982	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11039	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9983	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11040	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9984	N	N	
car	Vehicle Specific 5-cycle	7/11/2012	10075	N	N	
car	Vehicle Specific 5-cycle	7/11/2012	10074	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	10166	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	10167	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	10200	N	N	
car	Vehicle Specific 5-cycle	8/10/2012	10181	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle	8/10/2012	10185	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle	8/10/2012	10183	N	N	
car	Vehicle Specific 5-cycle	8/10/2012	10184	N	N	
car	Vehicle Specific 5-cycle	7/12/2012	11087	N	N	
car	Vehicle Specific 5-cycle	8/10/2012	11091	N	N	
car	Vehicle Specific 5-cycle	4/19/2013	11089	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	10647	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	10237	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	10648	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	10238	N	N	
car	Derived 5-cycle label	7/19/2012	10750	N	N	

car	Vehicle Specific 5-cycle 7/30/2012	10187		N	N
car	Derived 5-cycle label 6/25/2012	10707		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10538		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10751		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10454		N	N
car	Derived 5-cycle label 7/30/2012	10277		N	N
car	Derived 5-cycle label 6/25/2012	10708		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10539		N	N
car	Vehicle Specific 5-cycle 7/30/2012	11038		N	N
car	Vehicle Specific 5-cycle 1/16/2012	10186		N	N
car	Vehicle Specific 5-cycle 1/25/2012	11044		N	N
car	Vehicle Specific 5-cycle 1/16/2012	10532		N	N
car	Vehicle Specific 5-cycle 1/16/2012	10534		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10160		N	N
car	Derived 5-cycle label 6/22/2012	10301		N	N
car	Derived 5-cycle label 6/25/2012	10305		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10460		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10466		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10176		N	N
car	Vehicle Specific 5-cycle 6/25/2012	10174		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10531		N	N
car	Vehicle Specific 5-cycle 6/25/2012	10087		N	N
car	Derived 5-cycle label 6/22/2012	10300		N	N
car	Vehicle Specific 5-cycle 6/25/2012	10359		N	N
car	Vehicle Specific 5-cycle 6/25/2012	10358		N	N
car	Vehicle Specific 5-cycle 6/25/2012	10073		N	N
car	Derived 5-cycle label 6/25/2012	10304		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10459		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10465		N	N
cars	Derived 5-cycle label 6/25/2012	10298		N	N
cars	Derived 5-cycle label 6/25/2012	10303		N	N
cars	Vehicle Specific 5-cycle 7/30/2012	10457		N	N
cars	Vehicle Specific 5-cycle 7/30/2012	10464		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle 6/18/2012	10163		N	N
car	Vehicle Specific 5-cycle 6/25/2012	10322		N	N
car	Vehicle Specific 5-cycle 6/25/2012	10321		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10159		N	N
	Derived 5-cycle label 6/18/2012	11041		N	N
	Vehicle Specific 5-cycle 6/11/2012	10091		N	N
	Derived 5-cycle label 6/11/2012	11042		N	N
D	Vehicle Specific 5-cycle 6/18/2012	10214		N	N
D	Derived 5-cycle label 6/25/2012	10319		N	N
D	Derived 5-cycle label 6/25/2012	10257		N	N

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N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	position of N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET CONN	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	position of N	
N	N	N	Y	INLET COIN	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	Y	CONTINU(N	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET COIN	
N	N	ENGINE CN	Y	CONTINU(N	
N	N	ENGINE CN	Y	CONTINU(N	
N	N	ENGINE CCN	Y	CONTINUCN	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET COIN	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET COIN	
N	N	SCR EquiprN	N	N	
N	N	SCR EquiprN	N	N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET COIN	
N	N	N	Y	Electronic N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	INTAKE / EN	
N	N	V6 CYLININ	Y	MECANIC,N	Battery(s)



tolled and hydraulically adjusted.

h: The first subformula is  $\text{false}$  if  $\text{pick}(\text{H})$  is  $\text{true}$  and  $\text{selected}(\text{good})$  is  $\text{false}$  or if the second term  $\text{and}(\text{not}(\text{use}(\text{signal}(\text{h})), \text{not}(\text{signal}(\text{h}))))$  is  $\text{true}$  and  $\text{not}(\text{h}(\text{good}))$  is  $\text{true}$ .  
h: The first subformula is  $\text{false}$  if  $\text{pick}(\text{H})$  is  $\text{true}$  and  $\text{selected}(\text{good})$  is  $\text{false}$  or if the second term  $\text{and}(\text{not}(\text{use}(\text{signal}(\text{h})), \text{not}(\text{signal}(\text{h}))))$  is  $\text{true}$  and  $\text{not}(\text{h}(\text{good}))$  is  $\text{true}$ .

## STMENT

E / MECHANICAL-HYDRAULIC

in the first 6 weeks of life (100% of the total dose) and in the next 6 weeks (50% of the total dose). Each of the 12 doses was 0.1 mL of a 1:100 dilution of the vaccine.

E / MECHANICAL-HYDRAULIC

at least once for life (friends (all involved slightly) and 15% injection and 10% of 100 (size of male) each with a transfer of

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

## Quantitative Hydraulic Bulgatti GT.

RAIMED CONTINUOUSLY VVT

RAIMED CONTINUOUSLY VVT

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

ontrolled and hydraulically adjusted  
AL HYDRAULIC

YDRAULIC

controlled and hydraulically adjusted

ontrolled and hydraulically adjusted  
AL HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

y controlled and hydraulically adjusted

y controlled and hydraulically adjusted

AL HYDRAULIC

AL HYDRAULIC

ontrolled and hydraulically adjusted

ontrolled and hydraulically adjusted

AL HYDRAULIC

AL HYDRAULIC

AL HYDRAULIC

AL HYDRAULIC

AL HYDRAULIC

AL HYDRAULIC

ontrolled and hydraulically adjusted

ontrolled and hydraulically adjusted

ontrolled and hydraulically adjusted

RAULICALLY AND CONTROLLED ELECTRONICALLY

AKE CAMS

1 NiMH

288

6

21.5 On-Board

sq(2)Br̃Regen Br̃Regen Br̃Driver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive M̃Motor Ger  
 sq(2)Br̃Regen Br̃Regen Br̃Driver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive M̃Motor Ger

sq(2)Br̃Regen Br̃Regen Br̃Driver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive M̃Motor Ger  
 sq(2)Br̃Regen Br̃Regen Br̃Driver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive M̃Motor Ger

Other BRAKE PEBoth N

1 Other

Motor	Ger	Rated Mot	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Mete	Lean Burn	Fuel Cell V	Off Board	Oil Viscosi
M					GDI	Spark Ignit			N	5W40 VW
					CRDI	Common FN			N	5W40
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark IgnitN			N	5W40
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					CRDI	Common F			N	5W30 VW
h					GDI	Spark Ignit			N	5W30 VW
					GDI	Spark Ignit			N	5W30 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit			N	5W40 VW	
				GDI	Spark Ignit					

		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint	N	10W40 / V
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		MFI	Multipoint/	N	10W40 / V'
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W-40 VW
		GDI	Spark Ignit	N	5W-40 VW
		GDI	Spark Ignit	N	5W40 / VV
		CRDI	Common FN	N	5W40
		CRDI	Common FN	N	5W40
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint/	N	10W40 / V'
		GDI	Spark IgnitN	N	5W40
		GDI	Spark IgnitN	N	5W40
		GDI	Spark IgnitN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		MFI	Multipoint/	N	5W40 VW
		MFI	Multipoint/	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint/	N	10W40 / V'
		CRDI	Common FN	N	5W40
		CRDI	Common FN	N	5W40
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint/	N	10W40 / V'
		CRDI	Common F	N	5W40 VW
		CRDI	Common F	N	5W40 VW
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint/	N	10W40 / V'
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common F	N	5W30 VW
		GDI	Spark Ignit	N	5W40 VW
3 PHASE (	34	GDI	Spark IgnitN	N	5W40 VW

Model	Stop/Start	Trans in F	Trans as I	Model Type	Charge De	Charge De	Charge Su	EPA Calcul
N	No	Auto	(AM-S	Auto	(AM-S			
N	No	Auto	(AM-S	Auto	(AM-S			
N	No	Manual	(M	Manual	(M	A3 frt mani		
N	No	Auto	(AM-S	Auto	(AM-S	A3 quattro		
N	No	Auto	(AV-S	Auto	(AV-S			
N	No	Auto	(S8)	Auto	(S8)			
N	No	Manual	(M	Manual	(M			
N	No	Auto	(AV-S	Auto	(AV-S			
N	No	Auto	(S8)	Auto	(S8)			
N	No	Auto	(S8)	Auto	(S8)			
N	No	Manual	(M	Manual	(M			
N	No	Auto	(AV-S	Auto	(AV-S	Audi A6 C\		
N	No	Auto	(S8)	Auto	(S8)			
N	No	Auto	(S8)	Auto	(S8)	Audi A6 qu		
N	No	Auto	(S8)	Auto	(S8)			
N	No	Auto	(S8)	Auto	(S8)			
N	No	Auto	(S8)	Auto	(S8)			
N	No	Auto	(S8)	Auto	(S8)			
N	No	Auto	(S8)	Auto	(S8)			
N	No	Auto	(S8)	Auto	(S8)	Audi Q7		
N	No	Auto	(S8)	Auto	(S8)			
50700	No	Auto	(AM-S	Auto	(AM-S			
50700	No	Auto	(AM-S	Auto	(AM-S			
N	No	Auto	(AM-S	Auto	(AM-S			
N	No	Manual	(M	Manual	(M			
N	No	Auto	(AM-S	Auto	(AM-S			
N	No	Manual	(M	Manual	(M			
N	No	Auto	(AM-S	Auto	(AM-S			
50700	No	Auto	(AM-S	Auto	(AM-S			
50700	No	Auto	(AM-S	Auto	(AM-S			
N	No	Auto	(AM-S	Auto	(AM-S	TT Coupe		
N	No	Auto	(AM-S	Auto	(AM-S	TT Coupe		
N	No	Manual	(M	Manual	(M	TTRS		
N	No	Auto	(S6)	Auto	(S6)			
50700	No	Auto	(S8)	Auto	(S8)			
N	No	Auto	(S6)	Auto	(S6)			
50700	No	Auto	(S8)	Auto	(S8)			
N	No	Auto	(S6)	Auto	(S6)			
N	No	Auto	(S6)	Auto	(S6)			
50500	No	Auto	(AM-S	Auto	(AM-S			
50700	No	Auto	(AM-S	Auto	(AM-S			
50700	No	Auto	(AM-S	Auto	(AM-S			
50500	No	Auto	(AM-S	Auto	(AM-S			
50500	No	Manual	(M	Manual	(M	Gallardo C		
50500	No	Auto	(AM-S	Auto	(AM-S			
50500	No	Manual	(M	Manual	(M	Gallardo S		
N	No	Auto	(AM-S	Auto	(AM-S			

N	No	Auto(AM-S
N	No	Manual(M
N	No	Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Manual(M
N	No	Auto(AM-S
N	No	Manual(M
N	No	Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S
N	No	Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S
N	No	Auto(AM-S
N	No	Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Manual(M
N	No	Manual(M
N	No	Auto(AM-S
N	No	Manual(M
N	No	Auto(AM-S
N	No	Auto(AM-S
N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M
N	No	Manual(M
N	No	Manual(M
N	No	Manual(M
N	No	Auto(AM-S
N	No	Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Manual(M
N	No	Auto(AM-S
N	No	Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Manual(M
N	No	Auto(AM-S
N	No	Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Manual(M
N	No	Auto(AM-S
N	No	Auto(S6) Auto(S6) Tiguan fron
N	No	Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Touareg H



Dec Fuel	CO2 Calcu	EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
30.8			6	6DADXV02.	7		
46.2			9	8DVWXV02	5		
30.4			6	6DADXV02.	7		
30.9			6	6DADXV02.	5		
35.2			7	7DADXV02.	5		
30.8			6	6DADXV02.0	5		
33.2			7	7DADXV02.0	5		
35.2			7	7DADXV02.	5		
30.8			6	6DADXV02.0	5		
30.8			6	6DADXV02.0	5		
33.2			7	7DADXV02.0	5		
36.9			7	7DADXV02.	5		
30.8			6	6DADXV02.0	5		
28.1			5	5DADXJ03.0	5		
27.5			5	5DADXJ03.0	5		
27.5			5	5DADXJ03.0	5		
27.5			5	5DADXJ03.0	5		
19.3			3	3DVWXV06.	5		
29.5			6	6DADXV02.	5		
28.8			6	6DADXT02.0	5		
22.9			4	4DADXT03.	5		
28.1			5	4DADXT03.	5		
23			4	4DADXV04.	5		
22.6			4	4DADXV04.	5		
26.9			5	5DADXJ03.0	5		
23.5			5	5DADXJ03.0	5		
26.9			5	5DADXJ03.0	5		
23.5			5	5DADXJ03.0	5		
26.4			5	5DADXJ03.0	5		
25.5			5	5DADXV04.	5		
25.5			5	5DADXV04.	5		
33.3			7	7DADXV02.	5		
33.3			7	7DADXV02.	5		
25.6			5	5DADXV02.0	5		
17.2			2	2DBEXV06.	5		
23.6			4	4DADXV04.0	5		
17.4			2	2DBEXV06.	5		
21.8			4	4DADXV04.0	5		
17.2			2	2DBEXV06.	5		
17.4			2	2DBEXV06.	5		
12.6			1	1DBGTV08.0	5		
16.4			2	2DNLXV06.	5		
14.5			1	1DNLXV06.	5		
19.4			3	3DADXV05.	5		
17.4			3	3DADXV05.	5		
19.3			3	3DADXV05.	5		
16.1			2	2DADXV05.	5		
43.7			8	7DVWXV02	5		

31.8		6	6 DVWXV02.	7
43.4		8	7 DVWXV02.	5
30.7		6	6 DVWXV02	7
31.6		6	6 DVWXV02	7
31.9		6	6 DVWXV02.	7
31.5		6	6 DVWXV02.	7
43.4		8	7 DVWXV02.	5
30.7		6	6 DVWXV02	7
30.3		6	6 DVWXV02	7
32.3		6	6 DVWXV02.	7
31.8		6	6 DVWXV02.	7
25.8		5	5 DVWXV03.	5
24.8		5	5 DVWXV03.	5
32.4		6	6 DVWXV02	5
46.2		9	8 DVWXV02	5
46		9	8 DVWXV02	5
33.1		7	7 DVWXV02	7
32.2		7	7 DVWXV02	7
28.5		5	5 DAD XV02.	5
34.8		7	7 DAD XV02.	7
31.2		6	6 DAD XV02.	7
35		7	7 DVWXV02	7
46.2		9	8 DVWXV02	5
32.9		7	7 DVWXV02	5
34.7		8	8 DVWXV02	5
32.6		7	7 DVWXV02	7
46		9	8 DVWXV02	5
33.1		7	7 DVWXV02	7
32.2		7	7 DVWXV02	7
44.2		8	7 DVWXV02	5
46		9	8 DVWXV02	5
33.1		7	7 DVWXV02	7
32.2		7	7 DVWXV02	7
44.6		9	8 DVWXV02.	5
46.4		9	8 DVWXV02.	5
31.9		6	6 DVWXV02	7
31.7		7	7 DVWXV02	7
28.5		6	6 DVWXV03	5
29.9		6	6 DVWXJ02.	5
26.4		5	5 DVWXJ02.	5
29.6		6	6 DVWXJ02.	5
23.3		6	5 DADXT03.	5
25		4	4 DVWXT03	5
28.2		5	5 DVWXT03	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02 5

DVWXV02 5

DADXV02.0 5

DADXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02 5

DVWXV02 5

DVWXV02 5

DVWXV02 5

DVWXV02 5

DVWXV02 5

2017-FFP 004216

100		401	291	351	334.3
2600		361	248	310	281.3
2400		430	298	371	350.8
850		396	310	358	323.7
850		408	289	354	335.2
	400	421	310	371	332
2600		361	248	310	281.3
2400		430	298	371	350.8
100		418	329	378	335.4
100		403	283	349	327.2
100		425	279	360	346.3
	1900	507	334	429	419
	2650	523	351	446	434
100		405	257	338	321
3100		336	243	294	259.8
	3100	338	230	289	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
	1400	459	331	401	372
1100		379	271	331	295
100		416	287	358	340.4
1100		372	280	331	300.9
3100		336	243	294	259.8
850		381	299	344	315
2100		361	262	316	307
600		403	272	344	333.9
	3100	338	230	289	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
2850		348	256	307	270
	3100	338	230	289	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
3100		331	240	290	268
3350		330	239	289	266
850		401	289	350	328.2
1350		430	273	359	339.6
	900	449	319	391	372
	900	430	342	390	339.6
	1900	509	346	436	407
	900	435	343	394	343.7
	900	517	351	443	422
	3400	520	391	462	416
	1900	447	372	413	354

WV	WV CO2-Hwy	WV CO2-City	WV CO2-Comb	WV CO2-PHEV 240V	WV CO2-PHEV 120V	WV CO2-PHEV Total	WV CO2-PHEV City
232	287.6	432	319	381			
171.2	219.9	336	243	294			
220	291.5	442	296	376			
239	286.3	442	316	374			
199.8	251.6	373.3	303.6	324.4			
218.7	288.6	436.9	296.8	373.9			
202.1	267.2	397.1	276.4	342.8			
199.8	251.6	373.3	303.6	324.4			
218.7	288.6	436.9	296.8	373.9			
218.7	288.6	436.9	296.8	373.9			
202.1	267.2	397.1	276.4	342.8			
189	240	360	272	320			
218.7	288.6	436.9	296.8	373.9			
233	315.8	481.7	326	411.6			
238.7	323.9	498	320.9	418.4			
238.7	323.9	498	320.9	418.4			
238.7	323.9	498	320.9	418.4			
346	463.2	675	430	564.8			
238	300.7	444	333	394			
230	300.4	449.6	314.3	388.7			
296	387	573	412	501			
260	362.3	541	369	464			
296	389.5	562	379	480			
307	392.8	558	398	486			
248	329.4	488	321	412.9			
266	242.9	440.6	355	402.1			
248	329.4	488	321	412.9			
266	242.9	440.6	355	402.1			
260	355.7	500	341	428.5			
251.6	348.3	530.4	329.7	439.5			
251.6	348.3	530.4	329.7	439.5			
210	266	395	284	344.6			
210	266	395	284	344.6			
259	347	498.9	350.4	432.1			
361	519.4	787	474	646			
265	375.6	590	364	488.3			
359	513	768	469	634			
288	410.1	638	370	517.4			
361	519.4	787	474	646			
359	513	768	469	634			
495	709.5	1050.2	598.8	847.1			
353	547.2	836	481	676.3			
418	612.2	902	547	742			
349	460.7	657	447	563			
370	515.8	734	511	633			
348	462.4	660	446	564			
391	550.5	768	452	625			
184	232.4	350	260	310			

211.2	278.9	401	290.6	351.3
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.7
227.6	280.5	396.3	310.3	358.2
207.6	277.8	407.6	288.8	354.1
220.9	282	421	310	371
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.7
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
202.5	281.6	425.2	279.3	359.5
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	405	257	338
171.2	219.9	336	243	294
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
240	312.6	459	331	401
203	254	379	271	331
215.5	284.2	415.9	287	357.9
198.4	254.8	372	280.4	330.6
171.2	219.9	336	243	294
214	269.6	381.3	298.8	344.2
192	255.3	360.5	262	316.2
197.2	272.4	403.3	271.8	344.3
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
181	230	348	256	307
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.3
206.8	279.9	429.9	273.1	359.3
238	311.7	449	319	391
244.4	296.7	430.3	340.8	390
248	335.5	509	346	436
246.1	299.8	435	343	394
248	343.7	517	351	443
281	355.3	520.1	390.6	461.8
267	314.9	447	372	413



City	EPA Comp	Cons 10 Miles	DISTANCE	Comb Vol	Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT	EPA_INCR
N			4.2				4.2			
N			2.9				2.9			
N			4.2				4.2			
N			4.2				4.2			
N			3.8				3.8			
N			4.2				4.2			
N			3.8				3.8			
N			3.8				3.8			
N			4.2				4.2			
N			4.2				4.2			
N			3.8				3.8			
N			3.6				3.6			
N			4.2				4.2			
N			4.5				4.5			
N			4.8				4.8			
N			4.8				4.8			
N			4.8				4.8			
N			6.2				6.2			
N			4.3				4.3			
N			4.3				4.3			
N			5.6				5.6			
N			4.5				4.5			
N			5.6				5.6			
N			5.6				5.6			
N			4.8				4.8			
N			5				5			
N			4.8				4.8			
N			5				5			
N			4.8				4.8			
N			5				5			
N			5				5			
N			3.8				3.8			
N			3.8				3.8			
N			5				5			
N			7.1				7.1			
N			5.6				5.6			
N			7.1				7.1			
N			5.9				5.9			
N			7.1				7.1			
N			7.1				7.1			
N			10				10			
N			7.7				7.7			
N			8.3				8.3			
N			6.2				6.2			
N			6.7				6.7			
N			6.2				6.2			
N			7.1				7.1			
N			3.1				3.1			

N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8





**UNR EPA\_UNR EPA\_ADJ\_EPA\_PHEV**Label Submitter

[illegible]

[illegible]

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Fri 7/27/2012 10:41:49 PM  
**Subject:** Fw: 2013 FE Guide - data as of 7/26/2012 attached  
VW\_Group\_2013 FE Guide--all rel dates-no-sales-7-26-2012-w-7-27-4PM macro.xlsx

Richard,

Per my voicemail message, attached is the 7/26/2012 run with an updated macro. Hopefully most of the rounding errors have disappeared.

Please take a look at the errors that our macro flagged. Let me know if you think any of them should not have been flagged.

Regards---I'm out on Monday, back on Tues.

Dave

----- Forwarded by David Good/AA/USEPA/US on 07/27/2012 06:18 PM -----

**From:** David Good/AA/USEPA/US  
**To:** richard.thomas@vw.com  
**Date:** 07/27/2012 08:45 AM  
**Subject:** 2013 FE Guide - data as of 7/26/2012 attached

Richard,

Please take a look at the errors that our macro flagged. Let me know if you think any of them should not have been flagged.

Thanks

[attachment "VW\_Group\_2013 FE Guide--all rel dates-no-sales-7-26-2012.xlsx" deleted by David Good/AA/USEPA/US]

EPA com	VERIFY cc	Model Yr (Mfr Name	Division (	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
Diesel; Err	Y	2013Audi	Audi	A3	ADX	73	2.0 4
Error in coi	Y	2013Audi	Audi	A3	ADX	58	2.0 4
Error in coi	Y	2013Audi	Audi	A3	ADX	59	2.0 4
Error in coi	Y	2013Audi	Audi	A3 quattro	ADX	60	2.0 4
Error in coi	Y	2013Audi	Audi	A4	ADX	35	2.0 4
		2013Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013Audi	Audi	A4 quattro	ADX	40	2.0 4
Error in coi	Y	2013Audi	Audi	A5 Cabrio	ADX	36	2.0 4
		2013Audi	Audi	A5 Cabrio	ADX	39	2.0 4
		2013Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013Audi	Audi	A5 quattro	ADX	41	2.0 4
Error in coi	Y	2013Audi	Audi	A6	ADX	65	2.0 4
		2013Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013Audi	Audi	A6 quattro	ADX	77	3.0 6
Error in coi	Y	2013Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled	Y	2013Audi	Audi	A8	ADX	128	3.0 6
Relabeled	Y	2013Audi	Audi	A8L	ADX	129	3.0 6
		2013Audi	Audi	A8L	ADX	109	6.3 12
Error-- un	Y	2013Audi	Audi	allroad que	ADX	134	2.0 4
		2013Audi	Audi	Q5	ADX	91	2.0 4
Diesel; Err	Y	2013Audi	Audi	Q7	ADX	53	3.0 6
Error in coi	Y	2013Audi	Audi	Q7	ADX	61	3.0 6
Error in coi	Y	2013Audi	Audi	RS5	ADX	49	4.2 8
		2013Audi	Audi	RS5 Cabrio	ADX	52	4.2 8
Error in coi	Y	2013Audi	Audi	S4	ADX	42	3.0 6
Error in inc	Y	2013Audi	Audi	S4	ADX	45	3.0 6
Error in coi	Y	2013Audi	Audi	S5	ADX	43	3.0 6
Error in inc	Y	2013Audi	Audi	S5	ADX	46	3.0 6
Error in coi	Y	2013Audi	Audi	S5 Cabrio	ADX	44	3.0 6
Error in coi	Y	2013Audi	Audi	S6	ADX	48	4.0 8
Error in coi	Y	2013Audi	Audi	S7	ADX	47	4.0 8
Error in coi	Y	2013Audi	Audi	TT Coupe	ADX	66	2.0 4
Error in coi	Y	2013Audi	Audi	TT Roadst	ADX	67	2.0 4
		2013Audi	Audi	TTRS Coup	ADX	69	2.5 5
Error in coi	Y	2013Bentley	Bentley M	Continenta	BEX	110	6.0 12
		2013Bentley	Bentley M	Continenta	BEX	108	4.0 8
Error in coi	Y	2013Bentley	Bentley M	Continenta	BEX	113	6.0 12
		2013Bentley	Bentley M	Continenta	BEX	107	4.0 8
Error in coi	Y	2013Bentley	Bentley M	Continenta	BEX	111	6.0 12
Error in coi	Y	2013Bentley	Bentley M	Continenta	BEX	112	6.0 12
		2013Bugatti	Bugatti	Veyron	BGT	88	8.0 16
Error in coi	Y	2013Lamborghini	Lamborghini	Aventador	NLX	92	6.5 12
Error in coi	Y	2013Lamborghini	Lamborghini	Aventador	NLX	93	6.5 12
Error in coi	Y	2013Lamborghini	Lamborghini	Gallardo	CNLX	30	5.2 10
Error - sale	Y	2013Lamborghini	Lamborghini	Gallardo	CNLX	32	5.2 10
Error in coi	Y	2013Lamborghini	Lamborghini	Gallardo	SNLX	31	5.2 10
Error - sale	Y	2013Lamborghini	Lamborghini	Gallardo	SNLX	33	5.2 10
Diesel; Err	Y	2013Volkswage	Volkswage	BEETLE	VWX	84	2.0 4



Diesel; ErrY	2013VolkswageVolkswageBEETLE VWX	94	2.0	4
	2013VolkswageVolkswageBEETLE VWX	19	2.0	4
Error in anY	2013VolkswageVolkswageBEETLE VWX	89	2.0	4
Error in coiY	2013VolkswageVolkswageBEETLE VWX	17	2.5	5
	2013VolkswageVolkswageBEETLE VWX	27	2.5	5
Diesel; ErrY	2013VolkswageVolkswageBEETLE CVWX	85	2.0	4
	2013VolkswageVolkswageBEETLE COVWX	20	2.0	4
Error in anY	2013VolkswageVolkswageBEETLE CVWX	90	2.0	4
Error in coiY	2013VolkswageVolkswageBEETLE CVWX	18	2.5	5
	2013VolkswageVolkswageCC VWX	1	2.0	4
	2013VolkswageVolkswageCC VWX	4	2.0	4
	2013VolkswageVolkswageCC VWX	2	3.6	6
	2013VolkswageVolkswageCC 4MOTICVWX	3	3.6	6
Error in coiY	2013VolkswageVolkswageEos VWX	21	2.0	4
Diesel; ErrY	2013VolkswageVolkswageGOLF VWX	72	2.0	4
Diesel; ErrY	2013VolkswageVolkswageGOLF VWX	81	2.0	4
Error in coiY	2013VolkswageVolkswageGOLF VWX	16	2.5	5
Error in coiY	2013VolkswageVolkswageGOLF VWX	26	2.5	5
Error in coiY	2013VolkswageVolkswageGolf R VWX	57	2.0	4
Error in coiY	2013VolkswageVolkswageGTI VWX	22	2.0	4
	2013VolkswageVolkswageGTI VWX	23	2.0	4
Diesel; ErrY	2013VolkswageVolkswageJetta VWX	71	2.0	4
Diesel; ErrY	2013VolkswageVolkswageJetta VWX	80	2.0	4
Error: FE 1Y	2013VolkswageVolkswageJetta VWX	86	2.0	4
Error: FE 1Y	2013VolkswageVolkswageJetta VWX	87	2.0	4
Error in coiY	2013VolkswageVolkswageJetta VWX	50	2.0	4
Error in coiY	2013VolkswageVolkswageJetta VWX	51	2.0	4
Error in coiY	2013VolkswageVolkswageJetta VWX	15	2.5	5
Error in coiY	2013VolkswageVolkswageJetta VWX	25	2.5	5
Diesel; ErrY	2013VolkswageVolkswageJETTA SPVWX	74	2.0	4
Diesel; ErrY	2013VolkswageVolkswageJETTA SPVWX	79	2.0	4
Error in coiY	2013VolkswageVolkswageJETTA SPVWX	14	2.5	5
Error in coiY	2013VolkswageVolkswageJETTA SPVWX	24	2.5	5
Diesel;	2013VolkswageVolkswagePassat VWX	62	2.0	4
Diesel;	2013VolkswageVolkswagePassat VWX	64	2.0	4
Error in coiY	2013VolkswageVolkswagePassat VWX	82	2.5	5
Error in coiY	2013VolkswageVolkswagePassat VWX	83	2.5	5
Error in coiY	2013VolkswageVolkswagePassat VWX	63	3.6	6
Error in coiY	2013VolkswageVolkswageTIGUAN VWX	56	2.0	4
Error in coiY	2013VolkswageVolkswageTIGUAN VWX	68	2.0	4
Error in coiY	2013VolkswageVolkswageTIGUAN 4IVWX	55	2.0	4
Diesel; ErrY	2013VolkswageVolkswageTOUAREGVWX	54	3.0	6
Error in coiY	2013VolkswageVolkswageTOUAREGVWX	78	3.6	6
Hybrid; ErrY	2013VolkswageVolkswageTouareg HVWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S)	21	30	24				25.3	40.3	30.3902
Auto(AM-S)	21	28	24				26.6	38.2	30.8102
Auto(AM-S)	21	28	24				27.2	37.1	30.9119
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	28	23				24.8	35.9	28.8083
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S)	16	23	18				19.1	30	22.8332
Auto(AM-S)	16	22	18				19.2	28.9	22.6159
Auto(AM-S)	18	26	21				22.1	34.7	26.4165
Auto(AM-S)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S)	12	23	17				28.4068	42.2579	33.3217
Auto(AM-S)	12	23	17				28.4068	42.2579	33.3217
Manual(M	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(AM-S)	8	15	10				10	17.9	12.4782
Auto(AM-S)	11	18	13				12.6	25.2	16.2581
Auto(AM-S)	10	16	12				11.5	21.2	14.4817
Auto(AM-S)	13	20	16				16.1	25.4	19.276
Manual(M	12	20	15				14	24	17.2308
Auto(AM-S)	13	20	16				16	25.4	19.197
Manual(M	12	20	15				14	24	17.2308
Manual(M	12	20	15				14	24	17.2308

Auto(AM-S	22	30	25	26.5	42.0656	31.7942
Manual(M	22	30	25	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
Manual(M	21	29	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.2701
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
Auto(AM-S	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Manual(M	19	27	22	23.9	37.1	28.456
Auto(AM-S	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
Manual(M	22	33	26	26.5556	44.9945	32.56
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M	31	43	35	38.2	62.8	46.3746
Manual(M	22	32	26	26.1361	42.9279	31.7195
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Auto(AM-S	20	28	23	23.9	37.3	28.5088
Manual(M	18	27	22	21.7	35.8	26.3745
Auto(S6)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Highway	Unrd	Comb	Unr	Guzzler?	Air Aspir	IAir Aspir	Trans	Trans Des	Trans, Otr	# Gears
20.8046	29.9953	24.1394	TC	Turbochar	AMS	Automated	6				
20.8146	29.9953	24.1394	TC	Turbochar	M	Manual	6				
21.3388	27.7919	23.8286	TC	Turbochar	AMS	Automated	6				
20.891	28.1035	23.6187	TC	Turbochar	AMS	Automated	6				
ed-adjusted combined CO2 value +/- 1 gpm; Please revise. Verify as needed.	20.8046	29.9953	24.1394	TC	Turbochar	SCV	Selectable	8			
20.3576	29.8271	23.7508	TC	Turbochar	SA	Semi-Auto	8				
22.2425	32.0861	25.8049	TC	Turbochar	M	Manual	6				
ed-adjusted combined CO2 value +/- 1 gpm; Please revise. Verify as needed.	20.3576	29.8271	23.7508	TC	Turbochar	SCV	Selectable	8			
20.3576	29.8271	23.7508	TC	Turbochar	SA	Semi-Auto	8				
20.3576	29.8271	23.7508	TC	Turbochar	SA	Semi-Auto	8				
22.2425	32.0861	25.8049	TC	Turbochar	M	Manual	6				
24.5044	32.5529	27.5721	TC	Turbochar	SCV	Selectable	8				
20.3576	29.8271	23.7508	TC	Turbochar	SA	Semi-Auto	8				
18.3949	27.2332	21.5408	SC	Superchar	SA	Semi-Auto	8				
17.8058	27.5484	21.1758	SC	Superchar	SA	Semi-Auto	8				
e)(47.8058) Please revise. Please date to be effective. Separate data when vehicles were relabelled; Error in combined unr	13.1387	20.6025	15.6978	NA	Naturally	SA	Semi-Auto	8			
e)(47.8058) Please revise. Please date to be effective. Separate data when vehicles were relabelled; Error in combined unr	13.1387	20.6025	15.6978	NA	Naturally	SA	Semi-Auto	8			
val 19.9584 gpm; Error in Rounded Adjusted City CO2, we calculated 444; Error in Rounded Adjusted Highway CO2, w	19.7289	28.2351	22.823	TC	Turbochar	SA	Semi-Auto	8			
18.74	27.62	21.9099	TC	Turbochar	SA	Semi-Auto	8				
15.522	21.5458	17.7559	SC	Superchar	SA	Semi-Auto	8				
15.7409	23.3075	18.4339	NA	Naturally	AAMS	Automated	7				
15.8793	22.1836	18.2078	NA	Naturally	AAMS	Automated	7				
18.117	27.558	21.419	SC	Superchar	AMS	Automated	7				
ded 17.0438	26.023	20.1767	SC	Superchar	M	Manual	6				
18.117	27.558	21.419	SC	Superchar	AMS	Automated	7				
ded 17.0438	26.023	20.1767	SC	Superchar	M	Manual	6				
17.6699	25.953	20.6333	SC	Superchar	AMS	Automated	7				
16.761	26.9697	20.2022	TC	Turbochar	AMS	Automated	7				
16.761	26.9697	20.2022	TC	Turbochar	AMS	Automated	7				
22.407	31.1674	25.6515	TC	Turbochar	AMS	Automated	6				
22.407	31.1674	25.6515	TC	Turbochar	AMS	Automated	6				
17.751	25.2021	20.4751	TC	Turbochar	M	Manual	6				
11.2476	18.7327	13.7134	TC	Turbochar	SA	Semi-Auto	6				
15.0109	24.4645	18.1706	TC	Turbochar	SA	Semi-Auto	8				
11.5043	18.877	13.9574	TC	Turbochar	SA	Semi-Auto	6				
14.0639	23.9773	17.2766	TC	Turbochar	SA	Semi-Auto	8				
11.2476	18.7327	13.7134	TC	Turbochar	SA	Semi-Auto	6				
11.5043	18.877	13.9574	TC	Turbochar	SA	Semi-Auto	6				
8.4232	14.7698	10.4424	TC	Turbochar	AMS	Automated	7				
10.6055	18.4729	13.1199	NA	Naturally	AAMS	Automated	7				
9.7957	16.2453	11.9264	NA	Naturally	AAMS	Automated	7				
13.4655	19.7573	15.718	NA	Naturally	AAMS	Automated	6				
Verify as needed.	12.0883	19.9831	14.7021	NA	Naturally	AM	Manual	6			
13.3954	19.7741	15.6701	NA	Naturally	AAMS	Automated	6				
Verify as needed.	12.0883	19.9831	14.7021	NA	Naturally	AM	Manual	6			
27.8088	40.6616	32.4203	TC	Turbochar	M	Manual	6				

22.0469	29.5574	24.8746	TC	Turbochar	AMS	Automated	6
22.0202	29.5574	24.8746	TC	Turbochar	AMS	Automated	6
20.5408	29.7034	23.8517	TC	Turbochar	M	Manual	6
22.2864	28.5683	24.7338	NA	Naturally	ASA	Semi-Auto	6
21.7201	30.6767	25.0054	NA	Naturally	AM	Manual	5
27.8088	40.6616	32.4203	TC	Turbochar	M	Manual	6
21.1383	28.6751	23.9738	TC	Turbochar	AMS	Automated	6
20.5408	29.7034	23.8517	TC	Turbochar	M	Manual	6
21.2302	26.9749	23.4804	NA	Naturally	ASA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	Turbochar	AMS	Automated	6
20.8232	31.7255	24.6324	TC	Turbochar	M	Manual	6
17.4935	26.5716	20.6716	NA	Naturally	ASA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally	ASA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	Turbochar	AMS	Automated	6
22.0469	29.5574	24.8746	TC	Turbochar	AMS	Automated	6
23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally	AM	Manual	5
19.278	26.8882	22.0917	TC	Turbochar	M	Manual	6
24.2237	32.5108	27.3624	TC	Turbochar	AMS	Automated	6
21.2839	30.8324	24.7304	TC	Turbochar	M	Manual	6
22.0469	29.5574	24.8746	TC	Turbochar	AMS	Automated	6
23.1009	29.1554	25.4822	NA	Naturally	ASA	Semi-Auto	6
23.7854	31.6043	26.7652	TC	Turbochar	AMS	Automated	6
21.8931	32.6043	25.6912	TC	Turbochar	M	Manual	6
23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally	AM	Manual	5
22.0469	29.5574	24.8746	TC	Turbochar	AMS	Automated	6
23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally	AM	Manual	5
30.4633	40.2057	34.1916	TC	Turbochar	AMS	Automated	6
30.8024	42.6219	35.1943	TC	Turbochar	M	Manual	6
21.8993	32.1378	25.5642	NA	Naturally	AM	Manual	5
22.1078	30.6611	25.2814	NA	Naturally	ASA	Semi-Auto	6
19.7174	27.8048	22.6868	NA	Naturally	AAMS	Automated	6
18.1488	26.2617	21.0791	TC	Turbochar	M	Manual	6
20.6233	26.0617	22.7606	TC	Turbochar	SA	Semi-Auto	6
20.402	25.8545	22.5412	TC	Turbochar	SA	Semi-Auto	6
19.649	28.9961	22.9829	TC	Turbochar	SA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally	ASA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	Superchar	SA	Semi-Auto	8

Trans	Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Automated Manual with paddles)	N	N	F	2-Wheel DDVWXV02.0U5N			5	DU	Diesel, ultr	
Automated Manual with paddles)	N	N	F	2-Wheel DDADXV02.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	2-Wheel DDADXV02.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV02.		10		GP	Gasoline (I	
MT with paddles)	N	N	F	2-Wheel DDADXV02.		10		GP	Gasoline (I	
Y	N	N	A	All Wheel IDADXV02.(		10		GP	Gasoline (F	
N	N	N	A	All Wheel IDADXV02.(		10		GP	Gasoline (F	
MT with paddles)	N	N	F	2-Wheel DDADXV02.		10		GP	Gasoline (I	
Y	N	N	A	All Wheel IDADXV02.(		10		GP	Gasoline (F	
Y	N	N	A	All Wheel IDADXV02.(		10		GP	Gasoline (F	
N	N	N	A	All Wheel IDADXV02.(		10		GP	Gasoline (F	
MT with paddles)	N	N	F	2-Wheel DDADXV02.		10		GP	Gasoline (I	
Y	N	N	A	All Wheel IDADXV02.(		10		GP	Gasoline (F	
Y	N	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
Y	N	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (I	
ounded unadjusted CO2 value, which calculates error in combined unrounded adjusted CO2 values, calculate 4	Y	N	A	All Wheel IDVWXV03.0UG		10		GP	Gasoline (I	
ounded unadjusted CO2 value, which calculates error in combined unrounded adjusted CO2 values, calculate 4	Y	N	A	All Wheel IDVWXV03.0UG		10		GP	Gasoline (I	
ounded unadjusted CO2 value, which calculates error in combined unrounded adjusted CO2 values, calculate 4	Y	N	A	All Wheel IDVWXV06.		10		GP	Gasoline (F	
ounded unadjusted CO2 value, which calculates error in combined unrounded adjusted CO2 values, calculate 4	Y	N	A	All Wheel IDVWXV06.		10		GP	Gasoline (I	
ounded unadjusted CO2 value, which calculates error in combined unrounded adjusted CO2 values, calculate 4	Y	N	A	All Wheel IDADXT02.(		10		GP	Gasoline (F	
ounded unadjusted CO2 value, which calculates error in combined unrounded adjusted CO2 values, calculate 4	Y	N	A	All Wheel IDADXT03.03UG		10	5	DU	Diesel, ultr	
ounded unadjusted CO2 value, which calculates error in combined unrounded adjusted CO2 values, calculate 4	Y	N	A	All Wheel IDADXT03.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV04.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV04.		10		GP	Gasoline (F	
Automated Manual with paddles)	N	N	F	All Wheel IDADXJ03.0		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXJ03.0		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXJ03.0		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXJ03.0		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV04.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV04.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV04.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV02.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV02.		10		GP	Gasoline (I	
N	N	N	A	All Wheel IDADXV02.!		10		GP	Gasoline (F	
Y	N	N	A	All Wheel IDBEXV06.		85	333	GP	Gasoline (I	
Y	N	N	A	All Wheel IDADXV04.(		10		GP	Gasoline (F	
Y	N	N	A	All Wheel IDBEXV06.		85	333	GP	Gasoline (I	
Y	N	N	A	All Wheel IDADXV04.(		10		GP	Gasoline (F	
Y	N	N	A	All Wheel IDBEXV06.		85	333	GP	Gasoline (I	
Y	N	N	A	All Wheel IDBEXV06.		85	333	GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDBGTV08.(		10		GPR	Gasoline (F	
Automated Manual with paddles)	N	N	F	All Wheel IDNLXV06.		10		GPR	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDNLXV06.		10		GPR	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV05.		10		GP	Gasoline (I	
N	N	N	A	All Wheel IDADXV05.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	N	F	All Wheel IDADXV05.		10		GP	Gasoline (I	
N	N	N	A	All Wheel IDADXV05.		10		GP	Gasoline (I	
N	N	N	F	2-Wheel DDVWXV02.0U5N			5	DU	Diesel, ultr	

Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N	5	DU	Diesel, ultr
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10	GP	Gasoline (F
N N F	2-Wheel	DDVWXJ02.	10	GP	Gasoline (I
Y N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel	DDVWXV02.	10	G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0U5N	5	DU	Diesel, ultr
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10	GP	Gasoline (F
N N F	2-Wheel	DDVWXJ02.	10	GP	Gasoline (I
Y N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10	GP	Gasoline (F
N N F	2-Wheel	DDVWXJ02.0	10	GP	Gasoline (F
Y N F	2-Wheel	DDVWXV03.	10	GP	Gasoline (F
Y N A	All Wheel	IDVWXV03.	10	GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02	10	GP	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N	5	DU	Diesel, ultr
ify as needed. F	2-Wheel	DDVWXV02.0U5N	5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
N N A	All Wheel	IDADXV02.	10	GP	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDADXV02.	10	GP	Gasoline (I
N N F	2-Wheel	DDADXV02.0	10	GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N	5	DU	Diesel, ultr
ify as needed. F	2-Wheel	DDVWXV02.0U5N	5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXJ02.	10	GP	Gasoline (I
N N F	2-Wheel	DDVWXJ02.	10	GP	Gasoline (I
Y N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N	5	DU	Diesel, ultr
ify as needed. F	2-Wheel	DDVWXV02.0U5N	5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
N N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U4S	5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXV02.0U4S	5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
Y N F	2-Wheel	DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV03	10	GP	Gasoline (I
N N F	2-Wheel	DDVWXJ02.	10	GP	Gasoline (I
Y N F	2-Wheel	DDVWXJ02.	10	GP	Gasoline (I
Y N A	All Wheel	IDVWXJ02.	10	GP	Gasoline (I
Y N A	All Wheel	IDADXT03.02UG	5	DU	Diesel, ultr
Y N A	All Wheel	IDVWXT03	10	GP	Gasoline (I
Y N A	All Wheel	IDVWXT03	10	GP	Gasoline (I

City	Model	Year	MPG (15 ppm maximum)	Gas Guzzler	Gas Guzzler	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MPG	(15 ppm maximum)			Not exempt	89	20					
MPG	Unleaded, Recommended			Not exempt	89	20					
MPG	Unleaded, Recommended			Not exempt	89	20					
MPG	Unleaded, Recommended			Not exempt			89	20			
MPG	Unleaded, Recommended			Not exempt			91	12			
MPG	Unleaded, Recommended			Not exempt			91	12			
MPG	Unleaded, Recommended			Not exempt			91	12			
MPG	Unleaded, Recommended			Not exempt	81	10					
MPG	Unleaded, Recommended			Not exempt	81	10					
MPG	Unleaded, Recommended			Not exempt	84	12					
MPG	Unleaded, Recommended			Not exempt	84	12					
MPG	Unleaded, Recommended			Not exempt			98	16			
MPG	Unleaded, Recommended			Not exempt			98	16			
MPG	Unleaded, Recommended			Not exempt			98	16			
MPG	Unleaded, Recommended			Not exempt					94	25	
MPG	Unleaded, Recommended			Not exempt			100	15			
MPG	Unleaded, Recommended			Not exempt			107	15			
MPG	Unleaded, Recommended			Not exempt			107	15			
MPG	Unleaded, Recommended			Not exempt			90	28			
MPG	Unleaded, Recommended			Truck							
MPG	(15 ppm maximum)			Truck							
MPG	Unleaded, Recommended			Truck							
MPG	Unleaded, Recommended			Not exempt	84	13					
MPG	Unleaded, Recommended			Not exempt	81	10					
MPG	Unleaded, Recommended			Not exempt			90	13			
MPG	Unleaded, Recommended			Not exempt			90	13			
MPG	Unleaded, Recommended			Not exempt	84	13					
MPG	Unleaded, Recommended			Not exempt	84	13					
MPG	Unleaded, Recommended			Not exempt	81	10					
MPG	Unleaded, Recommended			Not exempt			98	16			
MPG	Unleaded, Recommended			Not exempt					94	25	
MPG	Unleaded, Recommended			Not exempt	74	13					
MPG	Unleaded, Recommended			Not exempt							
MPG	Unleaded, Recommended			Not exempt					74	13	
MPG	Unleaded, Recommended			Not exempt	102	13					
MPG	Unleaded, Recommended			Not exempt	89	11					
MPG	Unleaded, Recommended			Not exempt	89	11					
MPG	Unleaded, Recommended			Not exempt	86	7					
MPG	Unleaded, Recommended			Not exempt	86	7					
MPG	Unleaded, Recommended			Not exempt	86	7					
MPG	Unleaded, Recommended			Not exempt							
MPG	Unleaded, Recommended			Not exempt							
MPG	Unleaded, Recommended			Not exempt							
MPG	Unleaded, Recommended			Not exempt							
MPG	Unleaded, Recommended			Not exempt							
MPG	Unleaded, Recommended			Not exempt							
MPG	Unleaded, Recommended			Not exempt							
MPG	(15 ppm maximum)			Not exempt					85	15	



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Annual Fuel Economy	EPA Calculated	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadjusted
1700	1700		
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide	
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide	
2400	2400	reprocessed to pick up change to A3 quattro carline correction	
2200	2200	corrected forward speed to 8 on this CVT transmission	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and	
2200	2200		
2200	2200	corrected forward speeds to 8	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched	
2600	2600		
2700	2700		
2700	2700	added new A7 quattro data to the base level	
2700	2700	added new A7 quattro data to the base level	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG	
2500	2500		
2600	2600		
3150	3150		
3150	3150		
3150	3150	corrected city CO2 value, typo	
2700	2700		
2850	2850	corrected unrounded unadjusted city value	
2700	2700		
2850	2850	corrected city unrounded unadjusted value to 20.000 mpg	
2700	2700		
2850	2850		
2850	2850		
2200	2200		
2200	2200		
2850	2850		
4050	4050	8 13 10	9.5
3150	3150		
4050	4050	8 14 10	10.3
3350	3350		
4050	4050	8 13 10	9.5
4050	4050	8 14 10	10.3
5700	5700	corrected lock out to "yes" and AMS.	
4400	4400	lock up to YES.	
4750	4750	adjusted release date, lock up to YES.	
3550	3550	corrected fuel consumption per ASTM rounding procedure	
3800	3800		
3550	3550	corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure	
4050	4050		
1800	1800	corrected to use manufacturer's confirmatory tests	

1800	1800
2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
2400	2400
2150	2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g
2150	2150 corrected annual fuel cost, early label... update after Verify release 10
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400 annual fuel cost corrected, post release 10 amd AMS used, corrected highway value from 28 t
2400	2400
2300	2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjusted
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre
2700	2700 update after Verify release 10
2850	2850 UPDATE after Verify release 10
2300	2300
1700	1700
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
2600	2600
2100	2100
2300	2300 early label, upate after Verify release 10
1700	1700
1700	1700
2150	2150 corrected fuel savings and ratings
1900	1900
2100	2100
2200	2200
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1750	1750
1700	1700
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1700	1700
1650	1650
2050	2050 CORRCTED 5 YEAR FUEL SAVINGS
2150	2150
2500	2500
2700	2700
2500	2500 corrected CO2 values
2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio
2500	2500
3000	3000
2700	2700

Highway Fuel Economy (City/Highway/Combined) Alternative Fuel  
 Hwy2 City2 Comb2 City2 City2 Hwy2 City2 Comb2 City2 Range2 - Fuel2 Use2 Fuel2 Use2 Fuel2 Unit Fuel2 Unit

gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
gallons per 100 value...these values were switched

sumption to 6.2 per ASTM rounding procedure

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E-MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E-MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E-MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E-MPG	miles per g

roup

o 29 MPG

MPG value  
nd corresponding 5-cycle values  
cted calculated values

Relative Fuel	CO2	CO2	CO2	CO2	Fuel2 EPA	Descripto	Intake Val	Exhaust V	Carline CI	Carline CI
4612 Ann City	CO2	CO2	CO2	CO2	Fuel2 EPA	Descripto	Intake Val	Exhaust V	Carline CI	Carline CI
						SIDI;	2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Cæ	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Cæ	
						SIDI; Unde	2	25	Midsize Cæ	
						SIDI; Unde	2	26	Large Cars	
						SIDI;	2	26	Large Cars	
						SIDI;	2	27	Small Stati	
						SIDI;	2	231	Small SUV 4WD	
							2	233	Standard SUV 4W	
						SIDI;	2	233	Standard SUV 4W	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Cæ	
						SIDI;	2	25	Midsize Cæ	
						SIDI;	2	23	Subcompa	
						SIDI;	2	21	Two Seate	
4650	794	469	648	4650		SIDI;	2	23	Subcompa	
						FFV;	2	25	Midsize Cæ	
						SIDI;	2	24	Compact C	
4650	794	469	648	4650		FFV;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
4650	794	469	648	4650		FFV;	2	23	Subcompa	
4650	794	469	648	4650		FFV;	2	23	Subcompa	
							2	21	Two Seate	
							2	21	Two Seate	
							2	21	Two Seate	
						SIDI;	2	21	Two Seate	
						SIDI;	2	21	Two Seate	
						SIDI;	2	21	Two Seate	
						SIDI;	2	21	Two Seate	
							2	24	Compact C	

	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	23	Subcompa
SIDI;	2	23	Subcompa
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	23	Subcompa
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
	2	25	Midsize Ca
	2	25	Midsize Ca
	1	15	Midsize Ca
	1	15	Midsize Ca
SIDI;	2	25	Midsize Ca
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
SIDI;	2	25	Midsize Ca
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Derived 5-cycle label	6/22/2012	10302	N	N	
cars	Vehicle Specific 5-cycle label	6/11/2012	10147	N	N	
cars	Vehicle Specific 5-cycle label	6/11/2012	10148	N	N	
cars	Vehicle Specific 5-cycle label	6/11/2012	10331	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	10326	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	10360	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	10327	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	10362	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	10363	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle label	6/11/2012	10328	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle label	6/20/2012	10274	N	N	
car	economy/label specific 5-cycle label values were 27%	6/20/2012	10275	N	N	XX MPG highway, and XX MPG combined;
car	economy/label specific 5-cycle label values were 27%	6/20/2012	10276	N	N	XX MPG highway, and XX MPG combined;
car	Vehicle Specific 5-cycle label	8/16/2012	10646	N	N	
cars	Derived 5-cycle label	4/26/2012	10276	N	N	
	Vehicle Specific 5-cycle label	7/11/2012	10540	N	N	
D	Vehicle Specific 5-cycle label	7/11/2012	10203	N	N	
D	Derived 5-cycle label	6/11/2012	10150	N	N	
car	Vehicle Specific 5-cycle label	6/11/2012	10077	N	N	
car	Vehicle Specific 5-cycle label	7/11/2012	10452	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	9982	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	11039	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	9983	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	11040	N	N	
car	Vehicle Specific 5-cycle label	5/21/2012	9984	N	N	
car	Vehicle Specific 5-cycle label	7/30/2012	10075	N	N	
car	Vehicle Specific 5-cycle label	7/30/2012	10074	N	N	
car	Vehicle Specific 5-cycle label	6/11/2012	10166	N	N	
car	Vehicle Specific 5-cycle label	6/11/2012	10167	N	N	
car	Vehicle Specific 5-cycle label	6/11/2012	10200	N	N	
car	Vehicle Specific 5-cycle label	8/30/2012	10181	N	N	
car	Vehicle Specific 5-cycle label	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle label	8/30/2012	10185	N	N	
car	Vehicle Specific 5-cycle label	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle label	8/30/2012	10183	N	N	
car	Vehicle Specific 5-cycle label	8/30/2012	10184	N	N	
car	Vehicle Specific 5-cycle label	7/12/2012	11087	N	N	
car	Vehicle Specific 5-cycle label	8/30/2012	11091	N	N	
car	Vehicle Specific 5-cycle label	4/11/2013	11089	N	N	
car	Vehicle Specific 5-cycle label	6/11/2012	10647	N	N	
car	Vehicle Specific 5-cycle label	6/20/2012	10237	N	N	
car	Vehicle Specific 5-cycle label	6/20/2012	10648	N	N	
car	Vehicle Specific 5-cycle label	6/20/2012	10238	N	N	
car	Derived 5-cycle label	6/25/2012	10707	N	N	



car	Derived 5-cycle label 7/19/2012	10750		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10187		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10538		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10751		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10454		N	N
car	Derived 5-cycle label 6/25/2012	10708		N	N
car	Derived 5-cycle label 7/30/2012	10277		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10539		N	N
car	Vehicle Specific 5-cycle 7/30/2012	11038		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10186		N	N
car	Vehicle Specific 5-cycle 7/30/2012	11044		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10532		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10534		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10160		N	N
car	Derived 5-cycle label 6/22/2012	10301		N	N
car	Derived 5-cycle label 6/25/2012	10305		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10460		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10466		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10176		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10174		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10531		N	N
car	Derived 5-cycle label 6/22/2012	10300		N	N
car	Derived 5-cycle label 6/25/2012	10304		N	N
car	Vehicle Specific 5-cycle 6/25/2012	10359		N	N
car	Vehicle Specific 5-cycle 6/25/2012	10358		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10087		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10073		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10459		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10465		N	N
gens	Derived 5-cycle label 6/25/2012	10298		N	N
gens	Derived 5-cycle label 6/25/2012	10303		N	N
gens	Vehicle Specific 5-cycle 7/30/2012	10457		N	N
gens	Vehicle Specific 5-cycle 7/30/2012	10464		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10163		N	N
car	Vehicle Specific 5-cycle 6/23/2012	10321		N	N
car	Vehicle Specific 5-cycle 6/23/2012	10322		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10159		N	N
	Vehicle Specific 5-cycle 6/11/2012	10091		N	N
	Derived 5-cycle label 6/18/2012	11041		N	N
	Derived 5-cycle label 6/11/2012	11042		N	N
D	Vehicle Specific 5-cycle 6/11/2012	10214		N	N
D	Derived 5-cycle label 6/25/2012	10319		N	N
D	Derived 5-cycle label 6/25/2012	10257		N	N

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N	N	N	N	N
N	N	N	Y	position of N
N	N	N	Y	position of N
N	N	N	Y	INLET COIN
N	N	N	Y	INLET CONN
N	N	N	N	N
N	N	N	Y	position of N
N	N	N	Y	position of N
N	N	N	Y	INLET COIN
N	N	N	Y	position of N
N	N	N	Y	position of N
N	N	N	Y	position of N
N	N	N	Y	position of N
N	N	N	Y	CONTINU(N
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET COIN
N	N	N	Y	INLET COIN
N	N	ENGINE CN	Y	CONTINU(N
N	N	ENGINE CN	Y	CONTINU(N
N	N	ENGINE CCN	Y	CONTINUCN
N	N	N	N	N
N	N	N	N	N
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	position of N
N	N	N	Y	position of N
N	N	N	Y	INLET COIN
N	N	N	Y	INLET COIN
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET COIN
N	N	N	Y	INLET COIN
N	N	SCR Equip	N	N
N	N	SCR Equip	N	N
N	N	N	Y	INLET COIN
N	N	N	Y	INLET COIN
N	N	N	Y	Electronic N
N	N	N	Y	position of N
N	N	N	Y	position of N
N	N	N	Y	position of N
N	N	N	N	N
N	N	N	Y	INTAKE / EN
N	N	V6 CYLIN	Y	MECHANIC,N
				Battery(s)

tolled and hydraulically adjusted.

iv) The first buffer is full, block the whole second order with the second tank and the 6th buffer. The cylinder side of the inlet has no effect.

## STATEMENT

E / MECHANICAL-HYDRAULIC

in the first instance for little or no effect. All individuals who were not in the first instance for little or no effect were then included in the second instance for little or no effect.

E / MECHANICAL-HYDRAULIC

in the first order for both friends. All values are listed under the corresponding label (e.g., *Normalized* and *Actual*) for each transformation.

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

60 g/min Coal-HYDRAUGATTI GT.

RAIMED CONTINUOUSLY VVT

RAIMED CONTINUOUSLY VVT

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted  
ontrolled and hydraulically adjusted  
AL HYDRAULIC  
YDRAULIC

controlled and hydraulically adjusted  
ontrolled and hydraulically adjusted  
AL HYDRAULIC  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
y controlled and hydraulically adjusted  
y controlled and hydraulically adjusted

AL HYDRAULIC  
AL HYDRAULIC

ontrolled and hydraulically adjusted  
ontrolled and hydraulically adjusted  
AL HYDRAULIC  
AL HYDRAULIC

AL HYDRAULIC  
AL HYDRAULIC

AL HYDRAULIC  
AL HYDRAULIC

ontrolled and hydraulically adjusted  
ontrolled and hydraulically adjusted  
ontrolled and hydraulically adjusted

RAULICALLY AND CONTROLLED ELECTRONICALLY  
AKE CAMS                      1 NiMH                      288                      6                      21.5 On-Board

sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger  
sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger

sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger  
sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger

Other BRAKE PEBoth N

1 Other

Motor	Ger	Rated Mot	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Mete	Lean Burn	Fuel Cell V	Off Board	Oil Viscos
M					CRDI	Common FN			N	5W40
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark IgnitN			N	5W40
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
h					CRDI	Common F			N	5W30 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W30 VW
					GDI	Spark Ignit			N	5W30 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W40 VW
					GDI	Spark Ignit			N	5W30 VW
					GDI	Spark Ignit			N	5W30 VW
					GDI	Spark IgnitN			N	5W40
					GDI	Spark IgnitN			N	5W40
					GDI	Spark IgnitN		N	N	5W40 VW
					MFI	Multipoint/:	N		N	5W30 VW
					GDI	Spark Ignit			N	5W30 VW
					MFI	Multipoint/:	N		N	5W30 VW
					GDI	Spark Ignit			N	5W30 VW
h					MFI	Multipoint/:			N	5W30 VW
					MFI	Multipoint/:			N	5W30 VW
					MFI	Multipoint			N	10W60 VW
					MFI	Multipoint/:		N	N	5W30 VW
					MFI	Multipoint/:		N	N	5W30 VW
					GDI	Spark Ignit			N	10W60 VW
					GDI	Spark Ignit			N	10W60 VW
					GDI	Spark Ignit			N	10W60 VW
					GDI	Spark Ignit			N	10W60 VW
					CRDI	Common FN			N	5W40



		CRDI	Common FN		N	5W40
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		MFI	Multipoint/		N	10W40 / V'
		MFI	Multipoint		N	10W40 / V
		CRDI	Common FN		N	5W40
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		MFI	Multipoint/		N	10W40 / V'
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W-40 VW
		GDI	Spark Ignit		N	5W-40 VW
		GDI	Spark Ignit		N	5W40 / VW
		CRDI	Common FN		N	5W40
		CRDI	Common FN		N	5W40
		MFI	Multipoint/		N	10W40 / V'
		MFI	Multipoint/		N	10W40 / V'
		GDI	Spark IgnitN		N	5W40
		GDI	Spark IgnitN		N	5W40
		GDI	Spark IgnitN		N	5W40
		CRDI	Common FN		N	5W40
		CRDI	Common FN		N	5W40
		MFI	Multipoint/		N	5W40 VW
		MFI	Multipoint/		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		MFI	Multipoint/		N	10W40 / V'
		MFI	Multipoint/		N	10W40 / V'
		CRDI	Common FN		N	5W40
		CRDI	Common FN		N	5W40
		MFI	Multipoint/		N	10W40 / V'
		MFI	Multipoint/		N	10W40 / V'
		CRDI	Common F		N	5W40 VW
		CRDI	Common F		N	5W40 VW
		MFI	Multipoint/		N	10W40 / V'
		MFI	Multipoint/		N	10W40 / V'
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		CRDI	Common F		N	5W30 VW
		GDI	Spark Ignit		N	5W40 VW
3 PHASE C	34	GDI	Spark IgnitN	N	N	5W40 VW

**Stop/Start/Stop/Start Trans in FE Trans as Model Type Charge De Charge De Charge Su Charge Su EPA Calcul**

N	No	Auto(AM-SA	Auto(AM-S
N	No	Manual(M	Manual(M
N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-SA3 quattro
N	No	Auto(AV-SA	Auto(AV-S
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M	Manual(M
N	No	Auto(AV-SA	Auto(AV-S
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M	Manual(M
N	No	Auto(AV-SA	Auto(AV-SAudi A6 C\
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi A6 qu
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi Q7
N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-S
N	No	Manual(M	Manual(M
N	No	Auto(AM-SA	Auto(AM-S
N	No	Manual(M	Manual(M
N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-STT Coupe
N	No	Auto(AM-SA	Auto(AM-STT Coupe
N	No	Manual(M	Manual(M TTRS
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-S
N	No	Manual(M	Manual(M Gallardo C
N	No	Auto(AM-SA	Auto(AM-S
N	No	Manual(M	Manual(M Gallardo S
N	No	Manual(M	Manual(M

N	No	Auto(AM-SA)Auto(AM-S
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6
N	No	Auto(S6) Auto(S6)
N	No	Manual(M6)Manual(M6
N	No	Manual(M6)Manual(M6
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6CC M6
N	No	Auto(S6) Auto(S6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-SA)Auto(AM-S
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6Jetta Sport
N	No	Auto(S6) Auto(S6)
N	No	Manual(M6)Manual(M6
N	No	Manual(M6)Manual(M6
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6Jetta Sport
N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M6)Manual(M6
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6
N	No	Auto(S6) Auto(S6)
N	No	Manual(M6)Manual(M6
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6Jetta Sport
N	No	Auto(S6) Auto(S6)
N	No	Manual(M6)Manual(M6
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-SA)Auto(AM-S
N	No	Manual(M6)Manual(M6
N	No	Auto(S6) Auto(S6) Tiguan for
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Touareg H

Dec Fuel	CO2 Calcu	EPA Calculated Gas GEZ Rating	(GHG Rating)	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
46.2			9	8DVWXV02	5		
30.4			6	6DADXV02.	7		
30.8			6	6DADXV02.	7		
30.9			6	6DADXV02.	5		
35.2			7	7DADXV02.	5		
30.8			6	6DADXV02.0	5		
33.2			7	7DADXV02.0	5		
35.2			7	7DADXV02.	5		
30.8			6	6DADXV02.0	5		
30.8			6	6DADXV02.0	5		
33.2			7	7DADXV02.0	5		
36.9			7	7DADXV02.	5		
30.8			6	6DADXV02.0	5		
28.1			5	5DADXJ03.0	5		
27.5			5	5DADXJ03.0	5		
27.5			5	5DADXJ03.0	5		
27.5			5	5DADXJ03.0	5		
19.3			3	3DVWXV06.	5		
29.5			6	6DADXV02.	5		
28.8			6	6DADXT02.0	5		
28.1			5	4DADXT03.	5		
22.9			4	4DADXT03.	5		
23			4	4DADXV04.	5		
22.6			4	4DADXV04.	5		
26.9			5	5DADXJ03.0	5		
23.5			5	5DADXJ03.0	5		
26.9			5	5DADXJ03.0	5		
23.5			5	5DADXJ03.0	5		
26.4			5	5DADXJ03.0	5		
25.5			5	5DADXV04.	5		
25.5			5	5DADXV04.	5		
33.3			7	7DADXV02.	5		
33.3			7	7DADXV02.	5		
25.6			5	5DADXV02.0	5		
17.2			2	2DBEXV06.	5		
23.6			4	4DADXV04.0	5		
17.4			2	2DBEXV06.	5		
21.8			4	4DADXV04.0	5		
17.2			2	2DBEXV06.	5		
17.4			2	2DBEXV06.	5		
12.6			1	1DBGTV08.0	5		
16.4			2	2DNLXV06.	5		
14.5			1	1DNLXV06.	5		
19.4			3	3DADXV05.	5		
17.4			3	3DADXV05.	5		
19.3			3	3DADXV05.	5		
16.1			2	2DADXV05.	5		
43.4			8	7DVWXV02	5		

43.7		8	7DVWXV02	5
31.8		6	6DVWXV02.	7
30.7		6	6DVWXV02	7
31.6		6	6DVWXV02	7
31.9		6	6DVWXV02.	7
43.4		8	7DVWXV02	5
31.5		6	6DVWXV02.	7
30.7		6	6DVWXV02	7
30.3		6	6DVWXV02	7
32.3		6	6DVWXV02.	7
31.8		6	6DVWXV02.	7
25.8		5	5DVWXV03.	5
24.8		5	5DVWXV03.	5
32.4		6	6DVWXV02	5
46.2		9	8DVWXV02	5
46		9	8DVWXV02	5
33.1		7	7DVWXV02	7
32.2		7	7DVWXV02	7
28.5		5	5DADXV02.	5
34.8		7	7DADXV02.	7
31.2		6	6DADXV02.	7
46.2		9	8DVWXV02	5
46		9	8DVWXV02	5
32.9		7	7DVWXV02	5
34.7		8	8DVWXV02	5
35		7	7DVWXV02	7
32.6		7	7DVWXV02	7
33.1		7	7DVWXV02	7
32.2		7	7DVWXV02	7
44.2		8	7DVWXV02	5
46		9	8DVWXV02	5
33.1		7	7DVWXV02	7
32.2		7	7DVWXV02	7
44.6		9	8DVWXV02.	5
46.4		9	8DVWXV02.	5
31.7		7	7DVWXV02	7
31.9		6	6DVWXV02	7
28.5		6	6DVWXV03	5
26.4		5	5DVWXJ02.	5
29.9		6	6DVWXJ02.	5
29.6		6	6DVWXJ02.	5
23.3		6	5DADXT03.	5
25		4	4DVWXT03	5
28.2		5	5DVWXT03	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.0	5
DVWXJ02.	5
DVWXV02	5
DVWXV02.	5

DVWXJ02.0	5
DVWXJ02.	5
DVWXV02	5
DVWXJ02.0	5
DVWXJ02.0	5

DVWXV02	5
DVWXV02	5

DADXV02.	5
DADXV02.0	5

DVWXJ02.	5
DVWXJ02.	5
DVWXV02	5
DVWXV02	5

DVWXV02	5
DVWXV02	5

DVWXV02	5
DVWXV02	5

2017-FFP 004259



2600		350	260	310	272
100		401	291	351	334.3
2400		430	298	371	350.8
850		396	310	358	323.7
850		408	289	354	335.2
2600		361	248	310	281.3
	400	421	310	371	332
2400		430	298	371	350.8
100		418	329	378	335.4
100		403	283	349	327.2
100		425	279	360	346.3
	1900	507	334	429	419
	2650	523	351	446	434
100		405	257	338	321
3100		336	243	294	259.8
	3100	338	230	289	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
	1400	459	331	401	372
1100		379	271	331	295
100		416	287	358	340.4
3100		336	243	294	259.8
	3100	338	230	289	261.7
850		381	299	344	315
2100		361	262	316	307
1100		372	280	331	300.9
600		403	272	344	333.9
1350		374	286	334	315.6
1350		388	271	335	336.4
2850		348	256	307	270
	3100	338	230	289	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
3100		331	240	290	268
3350		330	239	289	266
1350		430	273	359	339.6
850		401	289	350	328.2
	900	449	319	391	372
	1900	509	346	436	407
	900	430	342	390	339.6
	900	435	343	394	343.7
	900	517	351	443	422
	3400	520	391	462	416
	1900	447	372	413	354

Model	City CO2 (g/mi)	City EPA CO2 (g/mi)	City CO2 (g/mi)	City CO2 (g/mi)	City CO2 (g/mi)
171.2	219.9	336	243	294	
220	291.5	442	296	376	
232	287.6	432	319	381	
239	286.3	442	316	374	
199.8	251.6	373.3	303.6	324.4	
218.7	288.6	436.9	296.8	373.9	
202.1	267.2	397.1	276.4	342.8	
199.8	251.6	373.3	303.6	324.4	
218.7	288.6	436.9	296.8	373.9	
218.7	288.6	436.9	296.8	373.9	
202.1	267.2	397.1	276.4	342.8	
189	240	360	272	320	
218.7	288.6	436.9	296.8	373.9	
233	315.8	481.7	326	411.6	
238.7	323.9	498	320.9	418.4	
238.7	323.9	498	320.9	418.4	
238.7	323.9	498	320.9	418.4	
346	463.2	675	430	564.8	
238	300.7	444	333	394	
230	300.4	449.6	314.3	388.7	
260	362.3	541	369	464	
296	387	573	412	501	
296	389.5	562	379	480	
307	392.8	558	398	486	
248	329.4	488	321	412.9	
266	242.9	440.6	355	402.1	
248	329.4	488	321	412.9	
266	242.9	440.6	355	402.1	
260	355.7	500	341	428.5	
251.6	348.3	530.4	329.7	439.5	
251.6	348.3	530.4	329.7	439.5	
210	266	395	284	344.6	
210	266	395	284	344.6	
259	347	498.9	350.4	432.1	
361	519.4	787	474	646	
265	375.6	590	364	488.3	
359	513	768	469	634	
288	410.1	638	370	517.4	
361	519.4	787	474	646	
359	513	768	469	634	
495	709.5	1050.2	598.8	847.1	
353	547.2	836	481	676.3	
418	612.2	902	547	742	
349	460.7	657	447	563	
370	515.8	734	511	633	
348	462.4	660	446	564	
391	550.5	768	452	625	
175.3	233.6	361	248.3	310.3	

184	232.4	350	260	310
211.2	278.9	401	290.6	351.3
214.6	289.5	430.3	298	370.7
227.6	280.5	396.3	310.3	358.2
207.6	277.8	407.6	288.8	354.1
175.3	233.6	361	248.3	310.3
220.9	282	421	310	371
214.6	289.5	430.3	298	370.7
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
202.5	281.6	425.2	279.3	359.5
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	405	257	338
171.2	219.9	336	243	294
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
240	312.6	459	331	401
203	254	379	271	331
215.5	284.2	415.9	287	357.9
171.2	219.9	336	243	294
170	220.5	337.9	229.6	289.2
214	269.6	381.3	298.8	344.2
192	255.3	360.5	262	316.2
198.4	254.8	372	280.4	330.6
197.2	272.4	403.3	271.8	344.3
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
181	230	348	256	307
170	220.5	337.9	229.6	289.2
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
179	228	331	240	290
162	219.2	330	239	289
206.8	279.9	429.9	273.1	359.3
217.8	278.5	400.9	289.4	350.3
238	311.7	449	319	391
248	335.5	509	346	436
244.4	296.7	430.3	340.8	390
246.1	299.8	435	343	394
248	343.7	517	351	443
281	355.3	520.1	390.6	461.8
267	314.9	447	372	413

City	Highway	Cons (mpg)	Distance (mi)	CO2 (lb)	Comb Vol	Higher Final Label	EPA_FUEL	EPA_GHG	EPA_AMT	EPA_INCR
N					2.9		2.9			
N					4.2		4.2			
N					4.2		4.2			
N					4.2		4.2			
N					3.8		3.8			
N					4.2		4.2			
N					3.8		3.8			
N					3.8		3.8			
N					4.2		4.2			
N					4.2		4.2			
N					3.8		3.8			
N					3.6		3.6			
N					4.2		4.2			
N					4.5		4.5			
N					4.8		4.8			
N					4.8		4.8			
N					4.8		4.8			
N					6.2		6.2			
N					4.3		4.3			
N					4.3		4.3			
N					4.5		4.5			
N					5.6		5.6			
N					5.6		5.6			
N					5.6		5.6			
N					4.8		4.8			
N					5		5			
N					4.8		4.8			
N					5		5			
N					4.8		4.8			
N					5		5			
N					5		5			
N					3.8		3.8			
N					3.8		3.8			
N					5		5			
N					7.1		7.1			
N					5.6		5.6			
N					7.1		7.1			
N					5.9		5.9			
N					7.1		7.1			
N					7.1		7.1			
N					10		10			
N					7.7		7.7			
N					8.3		8.3			
N					6.2		6.2			
N					6.7		6.7			
N					6.2		6.2			
N					7.1		7.1			
N					3.1		3.1			

N	3.1	3.1
N	4	4
N	4.2	4.2
N	4	4
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.7	3.7
N	3.8	3.8
N	3.8	3.8
N	3.8	3.8
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	4	4
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8

\\nas01n015-n016-files01-02\frnk\proj\01-02\01-02-RND\_EPA\_RND\_EPA\_UNR\EPA\_UNR\EPA\_UNR



## EPA\_UNR EPA\_ADJ EPA\_PHEV Label Submitter

[illegible]



[illegible]

**To:** "richard.thomas@vw.com" [richard.thomas@vw.com]  
**Cc:** CN=David Good/OU=AA/O=USEPA/C=US@EPA;"Boundy, Robert Gary" [boundyrg@ornl.gov]; Boundy, Robert Gary" [boundyrg@ornl.gov]  
**Bcc:** []  
**From:** "Hopson, Janet L."  
**Sent:** Tue 7/31/2012 2:44:30 PM  
**Subject:** FW: 2013 Audi RS5 image  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

[attachment "RS 5.jpg" deleted by David Good/AA/USEPA/US]  
Richard:

We'll fix this. If there are any other photos you would like us to use, please send them to Bob Boundy (he is cc'd here)

Thanks!

Janet

From: Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
Sent: Tuesday, July 31, 2012 10:40 AM  
To: 'Good.David@epamail.epa.gov'  
Cc: Hopson, Janet L.  
Subject: 2013 Audi RS5 image

Hello Dave and Janet;

The image that appears on the fuel economy guide online for the 2013 Audi RS5 is incorrect. Please find the proper image attached for the Audi RS5. If you have any questions or the image is not sufficient let me know.

Thanks,  
Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Jim Snyder/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA[]; obert Peavyhouse/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 7/31/2012 5:50:53 PM  
**Subject:** VW Group - Simple question about Test Data (Fuel Economy)

Hello Jim and Robert,

Could you help clarify a question I have about the data elements related to FE in the test data xml reports from VERIFY (?)

Could you explain the difference between "MFR FE" and "RoundedAdjustedFuelEconomyValue" tags found within the "EPAGeneratedEmissionTestDetails" section of the xml?

I have a test data set for a HWY test where these values differ, and I need to know which is appropriate to use (for CAFÉ type combined FE calculation).

Thanks!

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Tue 7/31/2012 6:16:06 PM  
**Subject:** VW Group - Audi Tests and Decision Information Submitted

Hi Jim,

I submitted the Audi 4.0l turbo tests we discussed along with the following Decision Information:

VID D3UF-DAQ-0, Audi A8L 5,000 ETW ;

We submitted FTP and US06 with Stop-Start active. These accompany the Stop-Start Deactivated tests already confirmed at EPA. A manufacturer retest is required for the FTP.

VID D3UF-DAQ-1, Audi A8 normal wheelbase, 4750 ETW;

We submitted FTP and US06 with Stop-Start active, plus a full array of tests with Stop-Start Deactivated. Manufacturer retests are required for both FTP's and the Hwy test.

Please review and let us know your confirmatory testing decision.

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Tue 7/31/2012 6:24:39 PM  
**Subject:** Fw: 2013 FE Guide - data as of 7/31/2012 attached  
VW\_Group\_2013 FEGuide-all rel dates-no-sales -7-31-2012-w-7-31 macro.xlsx

Richard,

Attached is the data in Verify as of 7/31/2012 at 10AM or so.

The macro has been changed several times---it seems "good to go." Please let me know if you find any errors flagged by the macro that might not be errors.

Thanks

Dave

----- Forwarded by David Good/AA/USEPA/US on 07/31/2012 02:19 PM -----

**From:** David Good/AA/USEPA/US  
**To:** richard.thomas@vw.com  
**Date:** 07/27/2012 06:41 PM  
**Subject:** Fw: 2013 FE Guide - data as of 7/26/2012 attached

Richard,

Per my voicemail message, attached is the 7/26/2012 run with an updated macro. Hopefully most of the rounding errors have disappeared.

Please take a look at the errors that our macro flagged. Let me know if you think any of them should not have been flagged.

Regards---I'm out on Monday, back on Tues.

Dave

[attachment "VW\_Group\_2013 FEGuide--all rel dates-no-sales-7-26-2012-w-7-27-4PM macro.xlsx" deleted by David Good/AA/USEPA/US]

----- Forwarded by David Good/AA/USEPA/US on 07/27/2012 06:18 PM -----

**From:** David Good/AA/USEPA/US  
**To:** richard.thomas@vw.com  
**Date:** 07/27/2012 08:45 AM  
**Subject:** 2013 FE Guide - data as of 7/26/2012 attached

Richard,

Please take a look at the errors that our macro flagged. Let me know if you think any of them should not

have been flagged.

Thanks

[attachment "VW\_Group\_2013 FEGuide--all rel dates-no-sales-7-26-2012.xlsx" deleted by David Good/AA/USEPA/US]

EPA comn	VERIFY cc	Model Yr (Mfr Name	Division (1	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
Error in coiY		2013Audi	Audi	A3	ADX	59	2.0 4
Diesel; ErrY		2013Audi	Audi	A3	ADX	73	2.0 4
		2013Audi	Audi	A3	ADX	58	2.0 4
Error in coiY		2013Audi	Audi	A3 quattro	ADX	60	2.0 4
Error in coiY		2013Audi	Audi	A4	ADX	35	2.0 4
		2013Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013Audi	Audi	A4 quattro	ADX	40	2.0 4
Error in coiY		2013Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013Audi	Audi	A5 Cabriolet	ADX	39	2.0 4
		2013Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013Audi	Audi	A5 quattro	ADX	41	2.0 4
Error in coiY		2013Audi	Audi	A6	ADX	65	2.0 4
		2013Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013Audi	Audi	A6 quattro	ADX	77	3.0 6
Error in coiY		2013Audi	Audi	A7 quattro	ADX	76	3.0 6
RelabeledY		2013Audi	Audi	A8	ADX	128	3.0 6
RelabeledY		2013Audi	Audi	A8L	ADX	129	3.0 6
		2013Audi	Audi	A8L	ADX	109	6.3 12
Error - unriY		2013Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013Audi	Audi	Q5	ADX	91	2.0 4
Error in coiY		2013Audi	Audi	Q7	ADX	61	3.0 6
Diesel; ErrY		2013Audi	Audi	Q7	ADX	53	3.0 6
Error in coiY		2013Audi	Audi	RS5	ADX	49	4.2 8
		2013Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
Error in coiY		2013Audi	Audi	S4	ADX	42	3.0 6
		2013Audi	Audi	S4	ADX	45	3.0 6
Error in coiY		2013Audi	Audi	S5	ADX	43	3.0 6
		2013Audi	Audi	S5	ADX	46	3.0 6
Error in coiY		2013Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
Error in coiY		2013Audi	Audi	S6	ADX	48	4.0 8
Error in coiY		2013Audi	Audi	S7	ADX	47	4.0 8
Error in coiY		2013Audi	Audi	TT Coupe	ADX	66	2.0 4
Error in coiY		2013Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013Audi	Audi	TTRS Coup	ADX	69	2.5 5
Error in coiY		2013Bentley	Bentley Motors	Continental	BEX	110	6.0 12
		2013Bentley	Bentley Motors	Continental	BEX	108	4.0 8
Error in coiY		2013Bentley	Bentley Motors	Continental	BEX	113	6.0 12
		2013Bentley	Bentley Motors	Continental	BEX	107	4.0 8
Error in coiY		2013Bentley	Bentley Motors	Continental	BEX	111	6.0 12
Error in coiY		2013Bentley	Bentley Motors	Continental	BEX	112	6.0 12
		2013Bugatti	Bugatti	Veyron	BGT	88	8.0 16
Error in coiY		2013Lamborghini	Lamborghini	Aventador	NLX	92	6.5 12
Error in coiY		2013Lamborghini	Lamborghini	Aventador	NLX	93	6.5 12
Error in coiY		2013Lamborghini	Lamborghini	Gallardo	CNLX	30	5.2 10
Error - saleY		2013Lamborghini	Lamborghini	Gallardo	CNLX	32	5.2 10
Error in coiY		2013Lamborghini	Lamborghini	Gallardo	SNLX	31	5.2 10
Error - saleY		2013Lamborghini	Lamborghini	Gallardo	SNLX	33	5.2 10
Diesel; ErrY		2013Volkswagen	Volkswagen	BEETLE	VWX	94	2.0 4



	2013 Volkswagen	Volkswagen	BEETLE	VWX	19	2.0	4
Diesel; ErrY	2013 Volkswagen	Volkswagen	BEETLE	VWX	84	2.0	4
Error in anY	2013 Volkswagen	Volkswagen	BEETLE	VWX	89	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	BEETLE	VWX	17	2.5	5
	2013 Volkswagen	Volkswagen	BEETLE	VWX	27	2.5	5
	2013 Volkswagen	Volkswagen	BEETLE COV	VWX	20	2.0	4
Diesel; ErrY	2013 Volkswagen	Volkswagen	BEETLE CV	VWX	85	2.0	4
Error in anY	2013 Volkswagen	Volkswagen	BEETLE CV	VWX	90	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE COV	VWX	18	2.5	5
	2013 Volkswagen	Volkswagen	CC	VWX	1	2.0	4
	2013 Volkswagen	Volkswagen	CC	VWX	4	2.0	4
	2013 Volkswagen	Volkswagen	CC	VWX	2	3.6	6
	2013 Volkswagen	Volkswagen	CC 4MOTIC	VWX	3	3.6	6
Error in coiY	2013 Volkswagen	Volkswagen	Eos	VWX	21	2.0	4
Diesel; ErrY	2013 Volkswagen	Volkswagen	GOLF	VWX	72	2.0	4
Diesel; ErrY	2013 Volkswagen	Volkswagen	GOLF	VWX	81	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	GOLF	VWX	16	2.5	5
Error in coiY	2013 Volkswagen	Volkswagen	GOLF	VWX	26	2.5	5
Error in coiY	2013 Volkswagen	Volkswagen	Golf R	VWX	57	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	GTI	VWX	22	2.0	4
	2013 Volkswagen	Volkswagen	GTI	VWX	23	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	Jetta	VWX	50	2.0	4
Diesel; ErrY	2013 Volkswagen	Volkswagen	Jetta	VWX	71	2.0	4
	2013 Volkswagen	Volkswagen	Jetta	VWX	86	2.0	4
	2013 Volkswagen	Volkswagen	Jetta	VWX	87	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	Jetta	VWX	51	2.0	4
Diesel; ErrY	2013 Volkswagen	Volkswagen	Jetta	VWX	80	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	Jetta	VWX	15	2.5	5
Error in coiY	2013 Volkswagen	Volkswagen	Jetta	VWX	25	2.5	5
Diesel; ErrY	2013 Volkswagen	Volkswagen	JETTA SP	VWX	74	2.0	4
Diesel; ErrY	2013 Volkswagen	Volkswagen	JETTA SP	VWX	79	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	JETTA SP	VWX	14	2.5	5
Error in coiY	2013 Volkswagen	Volkswagen	JETTA SP	VWX	24	2.5	5
Diesel;	2013 Volkswagen	Volkswagen	Passat	VWX	62	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	Passat	VWX	64	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	Passat	VWX	83	2.5	5
Error in coiY	2013 Volkswagen	Volkswagen	Passat	VWX	82	2.5	5
Error in coiY	2013 Volkswagen	Volkswagen	Passat	VWX	63	3.6	6
Error in coiY	2013 Volkswagen	Volkswagen	TIGUAN	VWX	68	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	TIGUAN	VWX	56	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	TIGUAN 4I	VWX	55	2.0	4
Diesel; ErrY	2013 Volkswagen	Volkswagen	TOUAREG	VWX	54	3.0	6
Error in coiY	2013 Volkswagen	Volkswagen	TOUAREG	VWX	78	3.6	6
Hybrid; ErrY	2013 Volkswagen	Volkswagen	Touareg H	VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	21	28	24			26.6	38.2	30.8102
Auto(AM-S	21	28	24			26.6	38.2	30.8102
Manual(M	21	30	24			25.3	40.3	30.3902
Auto(AM-S	21	28	24			27.2	37.1	30.9119
Auto(AM-S	21	28	24			27.2	37.1	30.9119
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Manual(M	22	32	26			27.624	43.9699	33.1736
Auto(AM-S	24	31	26			30.1185	44.4328	35.2251
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Manual(M	22	32	26			27.624	43.9699	33.1736
Auto(AM-S	25	33	28			31.4	46.9	36.8857
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Auto(S8)	18	27	22			23.1369	38.1	28.1037
Auto(S8)	18	27	22			22.5575	37.3745	27.4556
Auto(S8)	18	27	22			22.5575	37.3745	27.4556
Auto(S8)	18	27	22			22.5575	37.3745	27.4556
Auto(S8)	13	21	16			15.9	25.7	19.1935
Auto(S8)	20	27	23			24.8	35.9	28.8083
Auto(S8)	16	22	18			19.2813	29.852	22.9361
Auto(S8)	16	22	18			22.8	39.1	28.0649
Auto(AM-S	16	23	18			19.1	30	22.8332
Auto(AM-S	16	22	18			19.2	28.9	22.6159
Auto(AM-S	16	22	18			22.4	35.8	26.9372
Manual(M	17	26	20			20	33.4	24.4063
Auto(AM-S	18	26	21			22.4	35.8	26.9372
Manual(M	17	26	20			20	33.4	24.4063
Auto(AM-S	18	26	21			22.1	34.7	26.4165
Auto(AM-S	17	25	20			20.7539	35.335	25.4866
Auto(AM-S	17	25	20			20.7539	35.335	25.4866
Auto(AM-S	17	25	20			20.7539	35.335	25.4866
Auto(AM-S	12	19	14			28.4068	42.2579	33.3217
Auto(AM-S	12	19	14			28.4068	42.2579	33.3217
Manual(M	18	25	20			21.2	34.2	25.5746
Auto(S6)	11	19	14			13.7	24.6	17.112
Auto(S8)	15	24	18			19	33.5	23.5959
Auto(S6)	12	19	14			13.9	24.7	17.3049
Auto(S8)	14	24	17			17.4	30.8	21.6358
Auto(S6)	11	19	14			13.7	24.6	17.112
Auto(S6)	12	19	14			13.9	24.7	17.3049
Auto(AM-S	8	15	10			10	17.9	12.4782
Auto(AM-S	11	18	13			12.6	25.2	16.2581
Auto(AM-S	10	16	12			11.5	21.2	14.4817
Auto(AM-S	13	20	16			16.1	25.4	19.276
Manual(M	12	20	15			14	24	17.2308
Auto(AM-S	13	20	16			16	25.4	19.197
Manual(M	12	20	15			14	24	17.2308
Auto(AM-S	13	20	16			16	25.4	19.197
Auto(AM-S	13	20	16			16	25.4	19.197

Auto(AM-S	22	30	25	26.5	42.0656	31.7942
to 250. Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.						
Manual(M	22	30	25	25.2999	41.4024	30.6672
Manual(M) calculate 370.8; Please revise Verify as needed.						
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
to 250. Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.						
Manual(M	21	30	24	25.2999	41.4024	30.6672
Manual(M) calculate 370.8; Please revise Verify as needed.						
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
to 245. Error in Rounded Adjusted combined CO2, we calculate 297; Please revise Verify as needed.						
Manual(M	23	32	26	25.7303	43.9687	31.6354
Manual(M) calculate 342. Error in Rounded Adjusted Highway CO2, we calculate 243. Error in Rounded Adjusted combin						
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Manual(M	19	27	22	23.9	37.1	28.456
Auto(AM-S) calculate 330.4; Please revise Verify as needed.						
Manual(M	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
to 245. Error in Rounded Adjusted combined CO2, we calculate 297; Please revise Verify as needed.						
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M	24	34	28	28.8	46.2	34.6771
Manual(M	22	33	26	26.5556	44.9945	32.56
Manual(M) calculate 342. Error in Rounded Adjusted Highway CO2, we calculate 243. Error in Rounded Adjusted combin						
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S) Error in Rounded Adjusted City CO2, we calculate 352; Error in Rounded Adjusted Highway CO2, we calc						
Manual(M	23	33	26	26.3044	44.5088	32.2378
Manual(M) calculate 342. Error in Rounded Adjusted Highway CO2, we calculate 243. Error in Rounded Adjusted combin						
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S	20	28	23	23.9	37.3	28.5088
Auto(S6) calculate 341; Please revise Verify as needed.						
Manual(M	21	31	25	26.0779	36.3534	29.8782
Manual(M) calculate 343.6; Please revise Verify as needed.						
Auto(S6)	20	28	23	21.7	35.8	26.3745
Auto(S6) calculate 344; Please revise Verify as needed.						
Auto(S8)	20	29	23	25.7924	36.0745	29.5873
Auto(S8)	17	23	19	24.1	22.4	23.3041
ted CO2 value, we calculate 413.2; Please revise Verify as needed.						
Auto(S8)	20	24	21	21.3	31.6	24.9612
				25.1	33.1	28.1631

City	Highway	Unr	Comb	Unr	Guzzler?	Air Aspir	Air Aspir	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286				TC	Turbochar	AMS	Automated		6
29.8946	41.5209	34.2046				TC	Turbochar	AMS	Automated		6
20.8146	29.9953	24.1394				TC	Turbochar	M	Manual		6
20.891	28.1035	23.6187				TC	Turbochar	AMS	Automated		6
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049				TC	Turbochar	M	Manual		6
23.5355	30.6684	26.3554				TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049				TC	Turbochar	M	Manual		6
24.5044	32.5529	27.5721				TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
18.3949	27.2332	21.5408				SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758				SC	Superchar	SA	Semi-Auto		8
13.1387	20.6025	15.6978	G			NA	Naturally	SA	Semi-Auto		8
19.7289	28.2351	22.823				TC	Turbochar	SA	Semi-Auto		8
15.522	21.5458	17.7559				SC	Superchar	SA	Semi-Auto		8
18.74	27.62	21.9099				TC	Turbochar	SA	Semi-Auto		8
15.7409	23.3075	18.4339				NA	Naturally	AAMS	Automated		7
15.8793	22.1836	18.2078				NA	Naturally	AAMS	Automated		7
18.117	27.558	21.419				SC	Superchar	AMS	Automated		7
17.0438	26.023	20.1767				SC	Superchar	M	Manual		6
18.117	27.558	21.419				SC	Superchar	AMS	Automated		7
17.0438	26.023	20.1767				SC	Superchar	M	Manual		6
17.6699	25.953	20.6333				SC	Superchar	AMS	Automated		7
16.761	26.9697	20.2022				TC	Turbochar	AMS	Automated		7
16.761	26.9697	20.2022				TC	Turbochar	AMS	Automated		7
22.407	31.1674	25.6515				TC	Turbochar	AMS	Automated		6
22.407	31.1674	25.6515				TC	Turbochar	AMS	Automated		6
17.751	25.2021	20.4751				TC	Turbochar	M	Manual		6
11.2476	18.7327	13.7134	G			TC	Turbochar	SA	Semi-Auto		6
15.0109	24.4645	18.1706				TC	Turbochar	SA	Semi-Auto		8
11.5043	18.877	13.9574	G			TC	Turbochar	SA	Semi-Auto		6
14.0639	23.9773	17.2766	G			TC	Turbochar	SA	Semi-Auto		8
11.2476	18.7327	13.7134	G			TC	Turbochar	SA	Semi-Auto		6
11.5043	18.877	13.9574	G			TC	Turbochar	SA	Semi-Auto		6
8.4232	14.7698	10.4424	G			TC	Turbochar	AMS	Automated		7
10.6055	18.4729	13.1199	G			NA	Naturally	AAMS	Automated		7
9.7957	16.2453	11.9264	G			NA	Naturally	AAMS	Automated		7
13.4655	19.7573	15.718	G			NA	Naturally	AAMS	Automated		6
12.0883	19.9831	14.7021	G			NA	Naturally	AM	Manual		6
13.3954	19.7741	15.6701	G			NA	Naturally	AAMS	Automated		6
11.5388	19.5451	14.1465	G			NA	Naturally	AM	Manual		6
22.0469	30.8713	22.4925				TC	Turbochar	AMS	Automated		6

22.0202	29.5574	24.8746	TC	Turbochar	AMS	Automated	6
27.8088	40.6616	32.4203	TC	Turbochar	M	Manual	6
20.5408	29.7034	23.8517	TC	Turbochar	M	Manual	6
22.2864	28.5683	24.7338	NA	Naturally	ASA	Semi-Auto	6
21.7201	30.6767	25.0054	NA	Naturally	AM	Manual	5
21.1383	28.6751	23.9738	TC	Turbochar	AMS	Automated	6
27.8088	40.6616	32.4203	TC	Turbochar	M	Manual	6
20.5408	29.7034	23.8517	TC	Turbochar	M	Manual	6
21.2302	26.9749	23.4804	NA	Naturally	ASA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	Turbochar	AMS	Automated	6
20.8232	31.7255	24.6324	TC	Turbochar	M	Manual	6
17.4935	26.5716	20.6716	NA	Naturally	ASA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally	ASA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	Turbochar	AMS	Automated	6
29.8946	41.5209	34.2046	TC	Turbochar	AMS	Automated	6
20.5408	29.7034	23.8517	TC	Turbochar	M	Manual	6
23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally	AM	Manual	5
19.278	26.8882	22.0917	TC	Turbochar	M	Manual	6
24.2237	32.5108	27.3624	TC	Turbochar	AMS	Automated	6
21.2839	30.8324	24.7304	TC	Turbochar	M	Manual	6
23.7854	31.6043	26.7652	TC	Turbochar	AMS	Automated	6
29.8946	41.5209	34.2046	TC	Turbochar	AMS	Automated	6
23.1009	29.1554	25.4822	NA	Naturally	ASA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally	AM	Manual	5
21.8931	32.6043	25.6912	TC	Turbochar	M	Manual	6
20.5408	29.7034	23.8517	TC	Turbochar	M	Manual	6
23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally	AM	Manual	5
20.358	29.1554	25.4822	NA	Naturally	ASA	Semi-Auto	6
20.5408	29.7034	23.8517	TC	Turbochar	M	Manual	6
23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally	AM	Manual	5
30.4633	40.2057	34.1916	TC	Turbochar	AMS	Automated	6
30.8024	42.6219	35.1943	TC	Turbochar	M	Manual	6
22.1078	30.6611	25.2814	NA	Naturally	ASA	Semi-Auto	6
21.8993	32.1378	25.5642	NA	Naturally	AM	Manual	5
19.7174	27.8048	22.6868	NA	Naturally	AAMS	Automated	6
20.6233	26.0617	22.7606	TC	Turbochar	SA	Semi-Auto	6
18.1488	26.2617	21.0791	TC	Turbochar	M	Manual	6
20.402	25.8545	22.5412	TC	Turbochar	SA	Semi-Auto	6
19.649	28.9961	22.9829	TC	Turbochar	SA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally	ASA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	Superchar	SA	Semi-Auto	8

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Automated Manual with paddles)	N	F	2-Wheel DDAD XV02.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	2-Wheel DDVW XV02.0U5N			5	DU	Diesel, ultr	
N	N	F	2-Wheel DDAD XV02.		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.		10		GP	Gasoline (I	
MT with paddles)	N	F	2-Wheel DDAD XV02.		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV02.		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV02.		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV02.		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
Rounded unadjusted CO2 value, which calculate 4% error in combined unrounded adjusted CO2 values will calculate 4									
Rounded unadjusted CO2 value, which calculate 4% error in combined unrounded adjusted CO2 values will calculate 4									
Y	N	A	All Wheel IDVW XV06.		10		GP	Gasoline (F	
Verify calculate 333; Please revise Verify used AD XV02.									
Y	N	A	All Wheel IDAD XT02.		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT03.		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XT03.03UG			5	DU	Diesel, ultr	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XV02.		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEX V06.		85	333	GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV04.		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEX V06.		85	333	GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV04.		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEX V06.		85	333	GP	Gasoline (I	
Y	N	A	All Wheel IDBEX V06.		85	333	GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDBGT V08.		10		GPR	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDNLX V06.		10		GPR	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDNLX V06.		10		GPR	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV05.		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XV05.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV05.		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XV05.		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	2-Wheel DDVW XV02.0U5N			5	DU	Diesel, ultr	

Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
Y	N	F	2-Wheel DDVWXV02	10	G	Gasoline (I
N	N	F	2-Wheel DDVWXV02.	10	G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
Y	N	F	2-Wheel DDVWXV02.	10	G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10	GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV03.	10	GP	Gasoline (F
Y	N	A	All Wheel IDVWXV03.	10	GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02	10		GP	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N	5		DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02	10	G	Gasoline (I
N	N	F	2-Wheel DDVWXV02	10	G	Gasoline (I
N	N	A	All Wheel IDAD XV02.	10	GP	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDAD XV02.	10		GP	Gasoline (I
N	N	F	2-Wheel DDAD XV02.0	10	GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXJ02.	10		GP	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N	5		DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10	G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10	G	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
N	N	F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02	10	G	Gasoline (I
N	N	F	2-Wheel DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N	5		DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N	5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02	10	G	Gasoline (I
N	N	F	2-Wheel DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U4S	5		DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U4S	5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02	10	G	Gasoline (I
N	N	F	2-Wheel DDVWXV02	10	G	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV03	10		GP	Gasoline (I
Y	N	F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
N	N	F	2-Wheel DDVWXJ02.	10	GP	Gasoline (I
Y	N	A	All Wheel IDVWXJ02.	10	GP	Gasoline (I
Y	N	A	All Wheel IDADXT03.02UG	5	DU	Diesel, ultr
Y	N	A	All Wheel IDVWXT03	10	GP	Gasoline (I
Y	N	A	All Wheel IDVWXT03	10	GP	Gasoline (I





[illegible]

Annual Fuel Economy	EPA Calculated	Comment	City2 FE (l/100mi)	Hwy2 FE (l/100mi)	Low'd City2 FE (l/100mi)	Low'd Hwy2 FE (l/100mi)	Low'd CorCity2 FE (l/100mi)	City2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide						
1700	1700	corrected CO2 values						
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values						
2400	2400	reprocessed to pick up change to A3 quattro carline correction						
2200	2200	corrected forward speed to 8 on this CVT transmission						
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and						
2200	2200							
2200	2200	corrected forward speeds to 8						
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and						
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and						
2200	2200							
2050	2050	corrected forward speeds to 8, for this CVT trans						
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched						
2600	2600							
2700	2700							
2700	2700	added new A7 quattro data to the base level						
2700	2700	added new A7 quattro data to the base level						
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con						
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG						
2500	2500							
3150	3150							
2600	2600							
3150	3150							
3150	3150	corrected city CO2 value, typo						
2700	2700							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una						
2700	2700							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una						
2700	2700	corrected unadj and adj CO2 values						
2850	2850							
2850	2850							
2200	2200							
2200	2200							
2850	2850							
4050	4050	8 13 10 9.5						
3150	3150							
4050	4050	8 14 10 10.3						
3350	3350							
4050	4050	8 13 10 9.5						
4050	4050	8 14 10 10.3						
5700	5700	corrected lock out to "yes" and AMS.						
4400	4400	lock up to YES.						
4750	4750	adjusted release date, lock up to YES.						
3550	3550	corrected fuel consumption per ASTM rounding procedure						
3800	3800							
3550	3550	corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure						
4050	4050							
1800	1800							

2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400
2150	2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g
2150	2150 corrected annual fuel cost, early label... update after Verify release 10
2400	2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400
2300	2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre
2700	2700 update after Verify release 10
2850	2850 UPDATE after Verify release 10
2300	2300
1700	1700 corrected CO2 values
1700	1700 corrected CO2 values
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
2600	2600
2100	2100
2300	2300 early label, upate after Verify release 10
2100	2100
1700	1700 corrected CO2 values
2150	2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6
1900	1900 FE and GHG ratings corrected to 7
2200	2200
1700	1700 corrected CO2 values
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1750	1750 CO2 corrections
1700	1700 corrected CO2 values
2050	2050 early label, update after Verify release 10
2050	2050 update after Verify release 10 issued
1700	1700
1650	1650
2150	2150
2050	2050 CORRECTED 5 YEAR FUEL SAVINGS
2500	2500
2500	2500 corrected CO2 values
2700	2700
2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio
2500	2500
3000	3000
2700	2700

Highway Fuel Economy (City/Highway/Alternative Fuel)  
 Highway Fuel Economy (City/Highway/Alternative Fuel)

gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
 gallons per 100 value...these values were switched

sumption to 6.2 per ASTM rounding procedure

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E-MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E-MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E-MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E-MPG	miles per g

roup

o 29 MPG

ed MPG value

nd corresponding 5-cycle values

cted calculated values

Relative Fuel	CO2	CO2	CO2	CO2	Fuel2 EPA	Descripto	Intake Val	Exhaust V	Carline CI	Carline CI
4612	Ann City	CO2	CO2	Comb CO2	Fuel2 EPA	Descripto	Intake Val	Exhaust V	Carline CI	Carline CI
						SIDI;	2	27	Small Stati	
							2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI; Unde	2	25	Midsize Ca	
						SIDI; Unde	2	26	Large Cars	
						SIDI;	2	26	Large Cars	
						SIDI;	2	27	Small Stati	
						SIDI;	2	231	Small SUV 4WD	
						SIDI;	2	233	Standard SUV 4W	
							2	233	Standard SUV 4W	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	23	Subcompa	
						SIDI;	2	21	Two Seate	
4650	794	469	648	4650		SIDI;	2	23	Subcompa	
						FFV;	2	25	Midsize Ca	
4650	794	469	648	4650		SIDI;	2	24	Compact C	
						FFV;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
4650	794	469	648	4650		FFV;	2	23	Subcompa	
4650	794	469	648	4650		FFV;	2	23	Subcompa	
							2	21	Two Seate	
							2	21	Two Seate	
							2	21	Two Seate	
						SIDI;	2	21	Two Seate	
						SIDI;	2	21	Two Seate	
						SIDI;	2	21	Two Seate	
						SIDI;	2	21	Two Seate	
							2	24	Compact C	

SIDI;	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	23	Subcompa
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	1	15	Midsize Ca
	1	15	Midsize Ca
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
SIDI;	2	25	Midsize Ca
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Data	Unique LaLabel Rec	Relabel	Relabel D
gens	Vehicle Sp	1090 6/11/2012	10148	N	N
gens	Derived 5-	1816 6/22/2012	11296	N	N
cars	Vehicle Sp	756/11/2012	11302	N	N
gens	Vehicle Sp	654 6/11/2012	10331	N	N
car	Vehicle Sp	9647 5/21/2012	10326	N	N
car	Vehicle Sp	161245/21/2012	10360	N	N
car	Vehicle Sp	35555/21/2012	9974	N	N
car	Vehicle Sp	1169 5/21/2012	10327	N	N
car	Vehicle Sp	29175/21/2012	10362	N	N
car	Vehicle Sp	76505/21/2012	10363	N	N
car	Vehicle Sp	14235/21/2012	9976	N	N
car	Vehicle Sp	1672 6/18/2012	10328	N	N
car	Vehicle Sp	36065/21/2012	10364	N	N
car	Derived 5-	101406/25/2012	10288	N	N
car	Vehicle Sp	6563 6/22/2012	10274	N	N
car	Vehicle Sp	178002/2012	10278	N	N
car	Vehicle Sp	288002/2012	10278	N	N
car	Vehicle Sp	107 8/6/2012	10646	N	N
gens	Derived 5-	5265 4/26/2012	10276	N	N
	Vehicle Sp	216587/13/2012	10540	N	N
D	Derived 5-	6113 6/11/2012	10150	N	N
D	Vehicle Sp	707 7/16/2012	10203	N	N
car	Vehicle Sp	10457 6/8/2012	10077	N	N
car	Vehicle Sp	5012/3/2012	10452	N	N
car	Vehicle Sp	4170 5/21/2012	9982	N	N
car	Vehicle Sp	22925/21/2012	11284	N	N
car	Vehicle Sp	1777 5/21/2012	9983	N	N
car	Vehicle Sp	11375/21/2012	11285	N	N
car	Vehicle Sp	1688 5/21/2012	11314	N	N
car	Vehicle Sp	2197 7/30/2012	10075	N	N
car	Vehicle Sp	687 7/30/2012	10074	N	N
car	Vehicle Sp	1382 6/18/2012	10166	N	N
car	Vehicle Sp	484 6/18/2012	10167	N	N
car	Vehicle Sp	3436/18/2012	10200	N	N
car	Vehicle Sp	130 3/30/2012	10181	N	N
car	Vehicle Sp	385 4/9/2012	10208	N	N
car	Vehicle Sp	375 3/30/2012	10185	N	N
car	Vehicle Sp	910 4/9/2012	10207	N	N
car	Vehicle Sp	407 3/30/2012	10183	N	N
car	Vehicle Sp	20 3/30/2012	10184	N	N
car	Vehicle Sp	40 7/2/2012	11087	N	N
car	Vehicle Sp	130 8/7/2012	11091	N	N
car	Vehicle Sp	60 1/14/2013	11089	N	N
car	Vehicle Sp	77 6/11/2012	10647	N	N
car	Vehicle Sp	4 6/22/2012	10237	N	N
car	Vehicle Sp	65 6/22/2012	10648	N	N
car	Vehicle Sp	3 6/22/2012	10238	N	N
car	Derived 5-	5041 7/19/2012	10750	N	N



car	Vehicle Sp	57847/30/2012	10187		N	N
car	Derived 5-	2714 6/25/2012	10707		N	N
car	Vehicle Sp	5784 7/2/2012	10538		N	N
car	Vehicle Sp	14156 7/30/2012	10751		N	N
car	Vehicle Sp	24927/30/2012	10454		N	N
car	Derived 5-	57847/30/2012	10277		N	N
car	Derived 5-	1395 6/25/2012	10708		N	N
car	Vehicle Sp	2370 7/2/2012	10539		N	N
car	Vehicle Sp	148967/30/2012	11287		N	N
car	Vehicle Sp	259131/16/2012	10186		N	N
car	Vehicle Sp	16061/25/2012	11044		N	N
car	Vehicle Sp	8001/16/2012	10532		N	N
car	Vehicle Sp	6661/16/2012	10534		N	N
car	Vehicle Sp	6460 6/11/2012	10160		N	N
car	Derived 5-	4764 6/22/2012	11295		N	N
car	Derived 5-	3738 6/25/2012	11299		N	N
car	Vehicle Sp	4576 7/30/2012	10460		N	N
car	Vehicle Sp	2258 7/30/2012	10466		N	N
car	Vehicle Sp	2000 6/11/2012	10176		N	N
car	Vehicle Sp	5560 6/6/2012	10174		N	N
car	Vehicle Sp	51007/30/2012	10531		N	N
car	Vehicle Sp	1864 6/8/2012	10087		N	N
car	Derived 5-	20076 6/22/2012	11294		N	N
car	Vehicle Sp	121576/29/2012	11219		N	N
car	Vehicle Sp	49716/29/2012	11300		N	N
car	Vehicle Sp	1491 6/6/2012	10073		N	N
car	Derived 5-	6177 6/25/2012	11298		N	N
car	Vehicle Sp	78888 7/30/2012	10459		N	N
car	Vehicle Sp	5149 7/30/2012	10465		N	N
gens	Derived 5-	16733 6/25/2012	11301		N	N
gens	Derived 5-	6499 6/25/2012	11297		N	N
gens	Vehicle Sp	4089 7/30/2012	10457		N	N
gens	Vehicle Sp	163 7/30/2012	10464		N	N
car	Vehicle Sp	370666/11/2012	10158		N	N
car	Vehicle Sp	41186/18/2012	10163		N	N
car	Vehicle Sp	85115 6/23/2012	10322		N	N
car	Vehicle Sp	11065 6/23/2012	10321		N	N
car	Vehicle Sp	13728 6/11/2012	10159		N	N
	Derived 5-	21110 6/18/2012	11041		N	N
	Vehicle Sp	323 6/11/2012	10091		N	N
	Derived 5-	15519 6/11/2012	11042		N	N
D	Vehicle Sp	8393 6/18/2012	10214		N	N
D	Derived 5-	5730 6/25/2012	10319		N	N
D	Derived 5-	695 6/25/2012	10257		N	N

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N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	position of N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET CONN	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	position of N	
N	N	N	Y	INLET CONN	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	Y	CONTINU(N	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET COIN	
N	N	ENGINE CN	Y	CONTINU(N	
N	N	ENGINE CN	Y	CONTINU(N	
N	N	ENGINE CCN	Y	CONTINUCN	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET COIN	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET COIN	
N	N	SCR EquiprN	N	N	
N	N	SCR EquiprN	N	N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET COIN	
N	N	N	Y	Electronic IN	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	INTAKE / EN	
N	N	V6 CYLIN[N	Y	MECANIC,N	Battery(s)

tolled and hydraulically adjusted.

iv. The first job of the compiler is to take the source code and convert it into machine code. This is done by the compiler, which is a program that takes the source code as input and produces the machine code as output. The machine code is then stored in a file called an executable. The executable is a file that can be run on a computer. The executable is a file that contains the machine code that the computer can understand. The executable is a file that can be run on a computer. The executable is a file that contains the machine code that the computer can understand. The executable is a file that can be run on a computer. The executable is a file that contains the machine code that the computer can understand.

## STATEMENT

E / MECHANICAL-HYDRAULIC

in the first year for both friends (all values are significant), but less significant in the second year and not significant in the third year. The difference was

E / MECHANICAL-HYDRAULIC

in the first year of life (18 years). All values are shown when the confidence interval does not contain 0 (statistically significant). This table is a simplified version of the full table.

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

ECU AND CAR LIFT HYDRAULIC Buggatti GT.

RA1MEDCONTINUOUSLY VVT

RAIMED CONTINUOUSLY VVT

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

ontrolled and hydraulically adjusted

AL HYDRAULIC

YDRAULIC

controlled and hydraulically adjusted

ontrolled and hydraulically adjusted

YDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

y controlled and hydraulically adjusted

y controlled and hydraulically adjusted

AL HYDRAULIC

AL HYDRAULIC

ontrolled and hydraulically adjusted

ontrolled and hydraulically adjusted

AL HYDRAULIC

AL HYDRAULIC

AL HYDRAULIC

AL HYDRAULIC

AL HYDRAULIC

AL HYDRAULIC

ontrolled and hydraulically adjusted

ontrolled and hydraulically adjusted

ontrolled and hydraulically adjusted

RAULICALLY AND CONTROLLED ELECTRONICALLY

AKE CAMS

1 NiMH

288

6

21.5On-Board

sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger  
 sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger

sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger  
 sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger

sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger  
 sq(2)BrRegen BrRegen BrDriver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C# Drive MMotor Ger

Other BRAKE PEBoth N

1Other





		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint	N	10W40 / V
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		MFI	Multipoint	N	10W40 / V
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W-40 VW
		GDI	Spark Ignit	N	5W-40 VW
		GDI	Spark Ignit	N	5W40 / VV
		CRDI	Common FN	N	5W40
		CRDI	Common FN	N	5W40
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint/	N	10W40 / V'
		GDI	Spark IgnitN	N	5W40
		GDI	Spark IgnitN	N	5W40
		GDI	Spark IgnitN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		MFI	Multipoint	N	5W40 VW
		MFI	Multipoint	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint/	N	10W40 / V'
		CRDI	Common FN	N	5W40
		CRDI	Common FN	N	5W40
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint/	N	10W40 / V'
		CRDI	Common F	N	5W40 VW
		CRDI	Common F	N	5W40 VW
		MFI	Multipoint/	N	10W40 / V'
		MFI	Multipoint/	N	10W40 / V'
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common F	N	5W30 VW
		GDI	Spark Ignit	N	5W40 VW
3 PHASE C	34	GDI	Spark IgnitN	N	5W40 VW

**Stop/Start/Stop/Start Trans in FE Trans as I Model Type Charge De Charge De Charge Su Charge Su EPA Calcul**

N	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-S
N	No	Manual(M	Manual(M A3 frt man
N	No	Auto(AM-SA	Auto(AM-SA3 quattro
N	No	Auto(AV-S	Auto(AV-S
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M	Manual(M
N	No	Auto(AV-S	Auto(AV-S
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M	Manual(M
N	No	Auto(AV-S	Auto(AV-S Audi A6 C
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi A6 qu
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi Q7
N	No	Auto(S8)	Auto(S8)
\$0700	No	Auto(AM-SA	Auto(AM-S
\$0700	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-S
N	No	Manual(M	Manual(M
N	No	Auto(AM-SA	Auto(AM-S
N	No	Manual(M	Manual(M
N	No	Auto(AM-SA	Auto(AM-S
\$0700	No	Auto(AM-SA	Auto(AM-S
\$0700	No	Auto(AM-SA	Auto(AM-S
N	No	Auto(AM-SA	Auto(AM-STT Coupe
N	No	Auto(AM-SA	Auto(AM-STT Coupe
N	No	Manual(M	Manual(M TTRS
N	No	Auto(S6)	Auto(S6)
\$0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
\$0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S6)	Auto(S6)
\$50500	No	Auto(AM-SA	Auto(AM-S
\$0700	No	Auto(AM-SA	Auto(AM-S
\$0700	No	Auto(AM-SA	Auto(AM-S
\$50500	No	Auto(AM-SA	Auto(AM-S
\$50500	No	Manual(M	Manual(M Gallardo C
\$50500	No	Auto(AM-SA	Auto(AM-S
\$50500	No	Manual(M	Manual(M Gallardo S
N	No	Auto(AM-SA	Auto(AM-S

N	No	Auto(AM-S	Auto(AM-S
N	No	Manual(M€	Manual(M€
N	No	Manual(M€	Manual(M€
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M	Manual(M
N	No	Auto(AM-S	Auto(AM-S
N	No	Manual(M€	Manual(M€
N	No	Manual(M€	Manual(M€
N	No	Auto(S6)	Auto(S6)
N	No	Auto(AM-S	Auto(AM-S
N	No	Manual(M	Manual(M€
N	No	CC M6	
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(AM-S	Auto(AM-S
N	No	Auto(AM-S	Auto(AM-S
N	No	Manual(M€	Manual(M€
N	No	Jetta Sport	
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M€	Manual(M€
N	No	Manual(M€	Manual(M€
N	No	Manual(M€	Manual(M€
N	No	Auto(AM-S	Auto(AM-S
N	No	Manual(M	Manual(M€
N	No	Auto(AM-S	Auto(AM-S
N	No	Auto(AM-S	Auto(AM-S
N	No	Auto(S6)	Auto(S6)
N	No	Jetta Base	
N	No	Manual(M	Manual(M€
N	No	Manual(M€	Manual(M€
N	No	Manual(M€	Manual(M€
N	No	Jetta Sport	
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M€	Manual(M€
N	No	Auto(AM-S	Auto(AM-S
N	No	Manual(M€	Manual(M€
N	No	Jetta Sport	
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M€	Manual(M€
N	No	Auto(AM-S	Auto(AM-S
N	No	Manual(M	Manual(M€
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M€	Manual(M€
N	No	Auto(AM-S	Auto(AM-S
N	No	Auto(S6)	Auto(S6)
N	No	Tiguan fron	
N	No	Manual(M€	Manual(M€
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Touareg H	

Prop Fuel	CO2 Calcu	EPA Calculated Gas GE	Rating (GHG Rating)	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
30.8			6	6 DAD XV02.	7		
46.2			9	8 DVW XV02	5		
30.4			6	6 DAD XV02.	7		
30.9			6	6 DAD XV02.	5		
35.2			7	7 DAD XV02.	5		
30.8			6	6 DAD XV02.	5		
33.2			7	7 DAD XV02.	5		
35.2			7	7 DAD XV02.	5		
30.8			6	6 DAD XV02.	5		
30.8			6	6 DAD XV02.	5		
33.2			7	7 DAD XV02.	5		
36.9			7	7 DAD XV02.	5		
30.8			6	6 DAD XV02.	5		
28.1			5	5 DAD XJ03.	5		
27.5			5	5 DAD XJ03.	5		
27.5			5	5 DAD XJ03.	5		
27.5			5	5 DAD XJ03.	5		
19.3			3	3 DVW XV06.	5		
29.5			6	6 DAD XV02.	5		
28.8			6	6 DAD XT02.	5		
22.9			4	4 DAD XT03.	5		
28.1			5	4 DAD XT03.	5		
23			4	4 DAD XV04.	5		
22.6			4	4 DAD XV04.	5		
26.9			5	5 DAD XJ03.	5		
23.5			5	5 DAD XJ03.	5		
26.9			5	5 DAD XJ03.	5		
23.5			5	5 DAD XJ03.	5		
26.4			5	5 DAD XJ03.	5		
25.5			5	5 DAD XV04.	5		
25.5			5	5 DAD XV04.	5		
33.3			7	7 DAD XV02.	5		
33.3			7	7 DAD XV02.	5		
25.6			5	5 DAD XV02.	5		
17.2			2	2 DBEXV06.	5		
23.6			4	4 DAD XV04.	5		
17.4			2	2 DBEXV06.	5		
21.8			4	4 DAD XV04.	5		
17.2			2	2 DBEXV06.	5		
17.4			2	2 DBEXV06.	5		
12.6			1	1 DBGTV08.	5		
16.4			2	2 DNL XV06.	5		
14.5			1	1 DNL XV06.	5		
19.4			3	3 DAD XV05.	5		
17.4			3	3 DAD XV05.	5		
19.3			3	3 DAD XV05.	5		
16.1			2	2 DAD XV05.	5		
43.7			8	7 DVW XV02	5		

31.8		6	6DVWXV02.	7
43.4		8	7DVWXV02	5
30.7		6	6DVWXV02	7
31.6		6	6DVWXV02	7
31.9		6	6DVWXV02.	7
31.5		6	6DVWXV02.	7
43.4		8	7DVWXV02	5
30.7		6	6DVWXV02	7
30.3		6	6DVWXV02.	7
32.3		6	6DVWXV02.	7
31.8		6	6DVWXV02.	7
25.8		5	5DVWXV03.	5
24.8		5	5DVWXV03.	5
32.4		6	6DVWXV02	5
46.2		9	8DVWXV02	5
46		9	8DVWXV02	5
33.1		7	7DVWXV02	7
32.2		7	7DVWXV02	7
28.5		5	5DADXV02.	5
34.8		7	7DADXV02.	7
31.2		6	6DADXV02.	7
35		7	7DVWXV02	7
46.2		9	8DVWXV02	5
32.9		6	6DVWXV02.	5
34.7		7	7DVWXV02.	5
32.6		7	7DVWXV02	7
46		9	8DVWXV02	5
33.1		7	7DVWXV02	7
32.2		7	7DVWXV02	7
44.2		8	7DVWXV02	5
46		9	8DVWXV02	5
33.1		7	7DVWXV02	7
32.2		7	7DVWXV02	7
44.6		9	8DVWXV02.	5
46.4		9	8DVWXV02.	5
31.9		6	6DVWXV02	7
31.7		7	7DVWXV02	7
28.5		6	6DVWXV03	5
29.9		6	6DVWXJ02.	5
26.4		5	5DVWXJ02.	5
29.6		6	6DVWXJ02.	5
23.3		6	5DADXT03.	5
25		4	4DVWXT03	5
28.2		5	5DVWXT03	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.0 5

DVWXJ02. 5

DVWXV02 5

DVWXV02. 5

DVWXJ02.0 5

DVWXJ02. 5

DVWXV02. 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02 5

DVWXV02 5

DADXV02. 5

DADXV02.0 5

DVWXJ02. 5

DVWXJ02. 5

DVWXV02 5

DVWXV02 5

DVWXV02 5

DVWXV02 5

DVWXV02 5

DVWXV02 5

Highway Miles Per Gallon (City/Highway)	You Save \$	You Save \$	You Save \$	City CO2	RHwy CO2	Comb CO2	CO2- Volu	CO2- Volu	CO2-City U
		400	432	319	381				333
3100			336	243	294				259.8
		400	442	296	376				350
		400	442	316	374				325
600			373	304	342				293.8
		400	437	297	374				345.7
600			397	276	343				320.4
600			373	304	342				293.8
		400	437	297	374				345.7
		400	437	297	374				345.7
600			397	276	343				320.4
1350			360	272	320				282
		400	437	297	374				345.7
		1400	482	326	412				383.5
		1900	498	321	418				395.5
		1900	498	321	418				395.5
		1900	498	321	418				395.5
		6150	675	430	565				559
		900	450	325	394				352
		900	450	314	389				358
		4150	573	411	500				461
1400			541	369	464				446
		4150	562	379	480				466
		4150	558	398	486				463
		1900	488	321	413				369
		2650	441	355	402				443
		1900	488	321	413				369
		2650	441	355	402				443
		1900	500	341	428				401
		2650	530	330	440				427.3
		2650	530	330	440				427.3
600			395	284	345				312
600			395	284	345				312
		2650	499	350	432				419
		8650	787	474	646				649
		4150	590	364	488				466
		8650	768	469	634				639
		5150	638	370	517				510
		8650	787	474	646				649
		8650	768	469	634				639
		16900	1050	599	847				885
		10400	836	481	676				706
		12150	902	547	742				771
		6150	657	447	563				552
		7400	734	511	633				635
		6150	660	446	564				556
		8650	768	452	625				681
2600			350	260	310				272



100		401	291	351	334.3
2600		361	248	310	281.3
2400		430	298	371	350.8
850		396	310	358	323.7
850		408	289	354	335.2
	400	421	310	371	332
2600		361	248	310	281.3
2400		430	298	371	350.8
100		418	329	378	335.4
100		403	283	349	327.2
100		425	279	360	346.3
	1900	507	334	429	419
	2650	523	351	446	434
100		405	257	338	321
3100		336	243	294	259.8
3100		338	241	294	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
	1400	459	331	401	372
1100		379	271	331	295
100		416	287	358	340.4
1100		372	280	331	300.9
3100		336	243	294	259.8
850		381	299	344	315
2100		361	262	316	307
600		403	272	344	333.9
3100		338	241	294	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
2850		348	256	306	270
3100		338	241	294	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
3100		331	240	290	268
3350		330	239	289	266
850		401	289	350	328.2
1350		430	273	359	339.6
	900	449	319	391	372
	900	430	342	390	339.6
	1900	509	346	436	407
	900	435	343	394	343.7
	900	517	351	443	422
	3400	520	391	462	416
	1900	447	372	413	354

Model	CO2-Hwy	CO2-City	CO2-Comb	CO2-PHEV 240V	Char 120V	Char PHEV	TotaCity PHEV
232	287.6	432	319	381			
171.2	219.9	335.7	242.8	293.9			
220	291.5	442.5	295.6	376.4			
239	286.3	442	316	374			
199.8	251.6	373.3	303.6	324.4			
218.7	288.6	436.9	296.8	373.9			
202.1	267.2	397.1	276.4	342.8			
199.8	251.6	373.3	303.6	324.4			
218.7	288.6	436.9	296.8	373.9			
218.7	288.6	436.9	296.8	373.9			
202.1	267.2	397.1	276.4	342.8			
189	240	360	272	320			
218.7	288.6	436.9	296.8	373.9			
233	315.8	481.7	326	411.6			
238.7	323.9	498	320.9	418.4			
238.7	323.9	498	320.9	418.4			
238.7	323.9	498	320.9	418.4			
346	463.2	675	430	564.8			
238	300.7	444	333	394			
230	300.4	449.6	314.3	388.7			
296	387	573	412	501			
260	362.3	541	369	464			
296	389.5	562	379	480			
307	392.8	558	398	486			
248	329.4	488	321	412.9			
266	363.4	440.6	355	402.1			
248	329.4	488	321	412.9			
266	363.4	440.6	355	402.1			
256	335.8	500.4	340.8	428.5			
251.6	348.3	530.4	329.7	439.5			
251.6	348.3	530.4	329.7	439.5			
210	266	395	284	344.6			
210	266	395	284	344.6			
259	347	498.9	350.4	432.1			
361	519.4	787	474	646			
265	375.6	590	364	488.3			
359	513	768	469	634			
288	410.1	638	370	517.4			
361	519.4	787	474	646			
359	513	768	469	634			
495	709.5	1050.2	598.8	847.1			
353	547.2	836	481	676.3			
418	612.2	902	547	742			
349	460.7	657	447	563			
370	515.8	734	511	633			
348	462.4	660	446	564			
391	550.5	768	452	625			
184	232.4	350	260	310			

211.2	278.9	401	290.6	351.3
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.7
227.6	280.5	396.3	310.3	358.2
207.6	277.8	407.6	288.8	354.1
220.9	282	421	310	371
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.7
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
202.5	281.6	425.2	279.3	359.5
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	405	257	338
171.2	219.9	335.7	242.8	293.9
170	220.5	337.9	241.2	294.4
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
240	312.6	459	331	401
203	254	379	271	331
215.5	284.2	415.9	287	357.9
198.4	254.8	372	280.4	330.6
171.2	219.9	335.7	242.8	293.9
214	269.6	381.3	298.8	344.2
192	255.2	360.5	262	316.2
197.2	272.4	403.3	271.8	344.3
170	220.5	337.9	241.2	294.4
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
181	230	347.7	256	306.4
170	220.5	337.9	241.2	294.4
208.9	267.6	373.9	285.6	334.4
199.4	274.8	388	270.9	335.4
179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.3
206.8	279.9	429.9	273.1	359.3
238	311.7	449	319	391
244.4	296.7	430.3	340.8	390
248	335.5	509	346	436
246.1	299.8	435	343	394
248	343.7	517	351	443
281	355.3	520.1	390.6	461.8
267	314.9	447	372	413

City	EPA_Comb Vol	Cons 10 Miles	Distance	Label	EPA_FUEL	EPA_GHG	EPA_AMT	EPA_INCR
N			4.2		4.2			
N			2.9		2.9			
N			4.2		4.2			
N			4.2		4.2			
N			3.8		3.8			
N			4.2		4.2			
N			3.8		3.8			
N			3.8		3.8			
N			4.2		4.2			
N			4.2		4.2			
N			3.8		3.8			
N			3.6		3.6			
N			4.2		4.2			
N			4.5		4.5			
N			4.8		4.8			
N			4.8		4.8			
N			4.8		4.8			
N			6.2		6.2			
N			4.3		4.3			
N			4.3		4.3			
N			5.6		5.6			
N			4.5		4.5			
N			5.6		5.6			
N			5.6		5.6			
N			4.8		4.8			
N			5		5			
N			4.8		4.8			
N			5		5			
N			4.8		4.8			
N			5		5			
N			5		5			
N			3.8		3.8			
N			3.8		3.8			
N			5		5			
N			7.1		7.1			
N			5.6		5.6			
N			7.1		7.1			
N			5.9		5.9			
N			7.1		7.1			
N			7.1		7.1			
N			10		10			
N			7.7		7.7			
N			8.3		8.3			
N			6.2		6.2			
N			6.7		6.7			
N			6.2		6.2			
N			7.1		7.1			
N			3.1		3.1			

N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8





UNRIEPA_UNRIEPA_ADJ_EPA_PHEVLabel Submitter
UNRIEPA_UNRIEPA_ADJ_EPA_PHEVLabel Submitter

[illegible]



[illegible]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 8/2/2012 12:18:34 PM  
**Subject:** Confirmatory Tests for D3UJ-DAD/0

Hi Jim,

Thanks for the phone message regarding your decision to waive testing for VID: D3UJ-DAD/0, Test group DADXV04.03UJ.

As an experiment to solve the issue of missing confirmatory tests in Verify, I was successful in updating the Decision Information file again to now include the following EPA confirmatory tests in the set. Check your system and let me know if you now see all tests.

DADX91001362 - 90

DADX91001363 - 90

DADX91001370 - 21

DADX91001371 - 3

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY  
2565 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105-2498

August 1, 2012

OFFICE OF  
AIR AND RADIATION

Mr. Dennis Reineke  
Volkswagen of America  
3800 Hamlin Rd.,  
Auburn Hills, Michigan 48326

Dear Mr. Reineke;

The Environmental Protection Agency plans to include a Volkswagen Passat in its coast down surveillance testing program. The testing is tentatively scheduled for the week ending September 21, 2012.

A 2012 model year, low mileage vehicle will be procured, EPA's contractor URS will perform a maintenance on the vehicle and it will be ballasted to the proper weight. Maintenance will consist of an under-hood inspection and review of on-board computer codes as well as a wheel alignment, if necessary.

Coast down testing will take place on a track. Once the dyno coefficients have been established, the vehicle may also undergo a federal test procedure and highway cycle.

If you have any questions please contact me at (734) 214-4851.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lynn Sohacki".

Lynn Sohacki  
Compliance Division

Enclosure

**To:** "Berenz, Sebastian (EEO)" [Sebastian.Berenz@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Thur 8/2/2012 5:44:38 PM  
**Subject:** RE: Notification of a new in-use surveillance coast down test class R309  
[Garett.Horton@vw.com](mailto:Garett.Horton@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hi, Sebastian.

I will request for our records to be changed to indicate that Mr. Garrett Horton is the new contact.

Regarding the testing, we are going to do the testing off site and we will be testing several vehicles from different manufacturers during the same timeframe. Therefore, we are not inviting manufacturers to be present for the coast down testing.

I will be sending you a modified parameter sheet, however, with the VIN on it so that you will know which vehicle we will be testing.

Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

**From:** "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
**To:** Lynn Sohacki/AA/USEPA/US@EPA  
**Date:** 08/02/2012 01:37 PM  
**Subject:** RE: Notification of a new in-use surveillance coast down test class R309

Hello Lynn,

Thank you very much for letting me know.

We will assist you with the vehicle and would like to come in on this day.

Also please do me a favor and change the name for any purposes from Mr. Dennis Reineke to Mr. Garrett Horton in the future.

Garrett will be our permanent contact for our group.

Mr. Garrett Horton

Engineering Analyst  
Engineering & Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone: (248) 754-4231  
Cell: (814) 414-1387  
Fax: (248) 754-4207  
E-Mail: Garrett.Horton@vw.com

Thank you very much and let me know when the vehicle comes in.

Best regards

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Thursday, August 02, 2012 11:53 AM  
To: Berenz, Sebastian (EEO)  
Subject: Notification of a new in-use surveillance coast down test class R309

Dear Sebastian,

Attached is a letter that was sent to your company announcing the selection of an EPA in-use surveillance coast down test class. Please let me know if you have any questions.

Thanks,

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: Coastdown Passat-R309-NOTIF.pdf)



**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 8/2/2012 9:56:36 PM  
**Subject:** Re: Confirmatory Tests for D3UJ-DAD/0

Yes, they are there now. Good job.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/02/2012 08:18 AM  
Subject: Confirmatory Tests for D3UJ-DAD/0

Hi Jim,  
Thanks for the phone message regarding your decision to waive testing for VID: D3UJ-DAD/0, Test group DADXV04.03UJ.  
As an experiment to solve the issue of missing confirmatory tests in Verify, I was successful in updating the Decision Information file again to now include the following EPA confirmatory tests in the set. Check your system and let me know if you now see all tests.

DADX91001362 - 90  
DADX91001363 - 90  
DADX91001370 - 21  
DADX91001371 - 3

Regards,  
Bill Rodgers  
Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office  
Auburn Hills, MI  
(248) 754-4219  
william.rodgers@vw.com

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 8/2/2012 10:27:51 PM  
**Subject:** Re: VW Group - Certificate Request for 2013 Audi Q5 Hybrid

Bill, Was looking at the projected sales in the Part 1. Are these numbers correct? What were the volumes from 2012MY?

2013 MY

Projected Sales by Carline, Test Weight and Transmission Configuration

## Ex. 4 - CBI

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** Stephen Healy/AA/USEPA/US@EPA, "Giles, Michael (EEO)" <michael.giles@vw.com>  
**Date:** 07/26/2012 10:58 AM  
**Subject:** VW Group - Certificate Request for 2013 Audi Q5 Hybrid

Hello Jim,

We have submitted a Certificate Request for Audi test group DADXT02.0HUB, Audi Q5 Hybrid. The Initial Application and required manufacturer confirmatory tests have been submitted to Verify. Please review and process a Certificate of Conformity by August 3rd if possible. You can contact me directly if there are any questions about these submissions.

Best regards,

Bill Rodgers  
Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office  
Auburn Hills, MI  
(248) 754-4219  
william.rodgers@vw.com





**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 8/3/2012 5:48:05 PM  
**Subject:** FW: Certificate DADXT02.0HUB-019 with Evap Family DADXR0155B8H has been issued

Hi Jim,

If I remember correctly, usually when we get the "certificate has been issued" email message, the PDF certificate is available from VERIFY (through a link in the inbox). For the test group below, I found no corresponding email in my VERIFY account. So, I requested a report for the certificate dataset but received only xml files in the email.

Can help me to get the PDF copy of the signed certificate? I will need to send it to ARB soon so that they can complete their review.

Note - Bill submitted the request so it may be in his inbox - but he is out of the office.

Thanks,  
Mike

-----Original Message-----

From: no-reply@epa.gov [mailto:no-reply@epa.gov]  
Sent: Friday, August 03, 2012 7:38 AM  
To: Rodgers, William (EEO); Giles, Michael (EEO); Hart, Robert (VWoA)  
Subject: Certificate DADXT02.0HUB-019 with Evap Family DADXR0155B8H has been issued

The following is a courtesy copy of status message for a Verify submission. Any references made to links refer to links which will appear in the CDX Inbox message.

Certificate Number DADXT02.0HUB-019 with Evaporative Family DADXR0155B8H has been issued. A copy of the signed certificate is attached below. If you would like to have the certificate in an alternate 508 Compliant PDF format, please contact the Verify Help Desk.

The Verify submission this message relates to has the following values:

Test Group Name: DADXT02.0HUB

The following transaction identifier has been assigned to this request:

\_7d31a080-8976-48ee-9fb7-7300f725ce1f

Please do not reply to this message.

Cc: **Ex. 7**

From:	Ex. 7
-------	-------

**Sent:** Fri 8/3/2012 5:59:49 PM

**Subject:** Volkswagen and  
sebastian.berenz@vw.com

<http://www.volkswagen.com>

Hello	<b>Ex. 7</b>
-------	--------------

Hello Joel,

I just want to let you know, that we finished our IUVF program for high mileage MY2007 and low mileage MY2011 program as of today.

All vehicles are tested and submitted through Verfiy.

MY2007 High Mileage Program:

- 8 test groups
- 41 vehicles tested and submitted
- 9 SHED+QVR

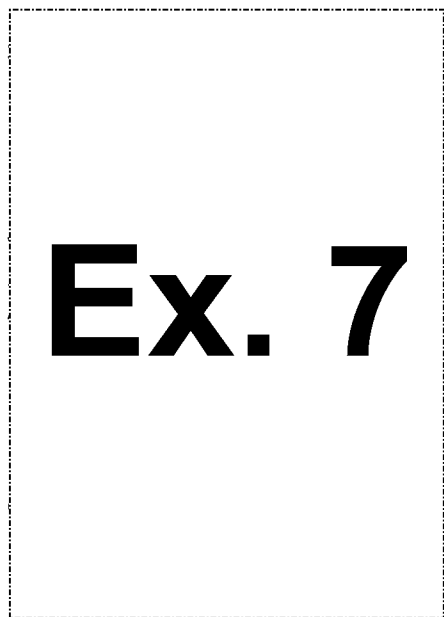
MY2011 Low Mileage Program:

- 15 test groups
- 29 vehicles tested and submitted
- 9 SHED+ORVR

We are planning to start the next program (high mileage MY2008) by October this year in our new laboratory in Oxnard, CA.

Please let me know if you have any questions.

Best regards



<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Fri 8/3/2012 7:18:51 PM  
**Subject:** 2013 FE Guide - Data in Verify as of 8/3/2012 attached  
VW Group 2013 FEGuide-all-rel-dates-no-sales-8-3-2012.xlsx

Richard,

Here you go. It looks a lot better to me. Thanks for correcting the errors. Have fun on your vacation.

Dave

EPA com	VERIFY cc	Model Yr (Mfr Name	Division (	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013Audi	Audi	A3	ADX	59	2.0 4
Diesel; Err	Y	2013Audi	Audi	A3	ADX	73	2.0 4
		2013Audi	Audi	A3	ADX	58	2.0 4
		2013Audi	Audi	A3 quattro	ADX	60	2.0 4
Error in coi	Y	2013Audi	Audi	A4	ADX	35	2.0 4
		2013Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013Audi	Audi	A4 quattro	ADX	40	2.0 4
Error in coi	Y	2013Audi	Audi	A5 Cabrio	ADX	36	2.0 4
		2013Audi	Audi	A5 Cabrio	ADX	39	2.0 4
		2013Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013Audi	Audi	A6	ADX	65	2.0 4
		2013Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013Audi	Audi	A6 quattro	ADX	77	3.0 6
Error in coi	Y	2013Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled	Y	2013Audi	Audi	A8	ADX	128	3.0 6
Relabeled	Y	2013Audi	Audi	A8L	ADX	129	3.0 6
		2013Audi	Audi	A8L	ADX	109	6.3 12
		2013Audi	Audi	allroad qu	ADX	134	2.0 4
		2013Audi	Audi	Q5	ADX	91	2.0 4
Error in coi	Y	2013Audi	Audi	Q7	ADX	61	3.0 6
Diesel; Err	Y	2013Audi	Audi	Q7	ADX	53	3.0 6
		2013Audi	Audi	RS5	ADX	49	4.2 8
		2013Audi	Audi	RS5 Cabrio	ADX	52	4.2 8
Error in coi	Y	2013Audi	Audi	S4	ADX	42	3.0 6
		2013Audi	Audi	S4	ADX	45	3.0 6
Error in coi	Y	2013Audi	Audi	S5	ADX	43	3.0 6
		2013Audi	Audi	S5	ADX	46	3.0 6
Error in coi	Y	2013Audi	Audi	S5 Cabrio	ADX	44	3.0 6
		2013Audi	Audi	S6	ADX	48	4.0 8
		2013Audi	Audi	S7	ADX	47	4.0 8
		2013Audi	Audi	TT Coupe	ADX	66	2.0 4
Error in coi	Y	2013Audi	Audi	TT Roadst	ADX	67	2.0 4
		2013Audi	Audi	TTRS Coup	ADX	69	2.5 5
Error in coi	Y	2013Bentley	Bentley M	Continenta	BEX	110	6.0 12
		2013Bentley	Bentley M	Continenta	BEX	108	4.0 8
Error in coi	Y	2013Bentley	Bentley M	Continenta	BEX	113	6.0 12
		2013Bentley	Bentley M	Continenta	BEX	107	4.0 8
Error in coi	Y	2013Bentley	Bentley M	Continenta	BEX	111	6.0 12
Error in coi	Y	2013Bentley	Bentley M	Continenta	BEX	112	6.0 12
		2013Bugatti	Bugatti	Veyron	BGT	88	8.0 16
Error in coi	Y	2013Lamborghini	Lamborghini	Aventador	NLX	92	6.5 12
Error in coi	Y	2013Lamborghini	Lamborghini	Aventador	NLX	93	6.5 12
Error in coi	Y	2013Lamborghini	Lamborghini	Gallardo	CNLX	30	5.2 10
Error - sale	Y	2013Lamborghini	Lamborghini	Gallardo	CNLX	32	5.2 10
Error in coi	Y	2013Lamborghini	Lamborghini	Gallardo	SNLX	31	5.2 10

Error - saleY	2013Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel; ErrY	2013Volkswage	Volkswage	BEETLE VWX	94	2.0	4
	2013Volkswage	Volkswage	BEETLE VWX	19	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	BEETLE VWX	84	2.0	4
Error in anY	2013Volkswage	Volkswage	BEETLE VWX	89	2.0	4
Error in coiY	2013Volkswage	Volkswage	BEETLE VWX	17	2.5	5
	2013Volkswage	Volkswage	BEETLE VWX	27	2.5	5
	2013Volkswage	Volkswage	BEETLE COVWX	20	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	BEETLE CVWX	85	2.0	4
	2013Volkswage	Volkswage	BEETLE COVWX	90	2.0	4
	2013Volkswage	Volkswage	BEETLE COVWX	18	2.5	5
	2013Volkswage	Volkswage	CC VWX	1	2.0	4
	2013Volkswage	Volkswage	CC VWX	4	2.0	4
	2013Volkswage	Volkswage	CC VWX	2	3.6	6
	2013Volkswage	Volkswage	CC 4MOTIKVWX	3	3.6	6
	2013Volkswage	Volkswage	Eos VWX	21	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	GOLF VWX	72	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	GOLF VWX	81	2.0	4
	2013Volkswage	Volkswage	GOLF VWX	16	2.5	5
	2013Volkswage	Volkswage	GOLF VWX	26	2.5	5
Error in coiY	2013Volkswage	Volkswage	Golf R VWX	57	2.0	4
	2013Volkswage	Volkswage	GTI VWX	22	2.0	4
	2013Volkswage	Volkswage	GTI VWX	23	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	50	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	Jetta VWX	71	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	86	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	87	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	51	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	Jetta VWX	80	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	15	2.5	5
	2013Volkswage	Volkswage	Jetta VWX	25	2.5	5
Diesel; ErrY	2013Volkswage	Volkswage	JETTA SP VWX	74	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	JETTA SP VWX	79	2.0	4
	2013Volkswage	Volkswage	JETTA SPO VWX	14	2.5	5
	2013Volkswage	Volkswage	JETTA SPO VWX	24	2.5	5
Diesel;	2013Volkswage	Volkswage	Passat VWX	62	2.0	4
Diesel;	2013Volkswage	Volkswage	Passat VWX	64	2.0	4
	2013Volkswage	Volkswage	Passat VWX	83	2.5	5
	2013Volkswage	Volkswage	Passat VWX	82	2.5	5
	2013Volkswage	Volkswage	Passat VWX	63	3.6	6
Error in RoY	2013Volkswage	Volkswage	TIGUAN VWX	68	2.0	4
Error in coiY	2013Volkswage	Volkswage	TIGUAN VWX	56	2.0	4
Error in coiY	2013Volkswage	Volkswage	TIGUAN 4IVWX	55	2.0	4
Diesel;	2013Volkswage	Volkswage	TOUAREG VWX	54	3.0	6
Error in coiY	2013Volkswage	Volkswage	TOUAREGVWX	78	3.6	6
Hybrid;	2013Volkswage	Volkswage	Touareg H VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Manual(M	21	30	24				25.3	40.3	30.3902
Auto(AM-S	21	28	24				27.2	37.1	30.9119
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	27	22				22.5575	37.3745	27.4556
Auto(S8)	18	27	22				22.5575	37.3745	27.4556
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	19	28	22				19.2813	29.852	22.9361
Auto(AM-S	16	23	18				19.1	30	22.8332
Auto(AM-S	16	22	18				19.2	28.9	22.6159
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				20	33.4	24.4063
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				20	33.4	24.4063
Auto(AM-S	18	26	21				22.1	34.7	26.4165
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Manual(M	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(AM-S	8	15	10				10	17.9	12.4782
Auto(AM-S	11	18	13				12.6	25.2	16.2581
Auto(AM-S	10	16	12				11.5	21.2	14.4817
Auto(AM-S	13	20	16				16.1	25.4	19.276
Manual(M	12	20	15				14	24	17.2308
Auto(AM-S	13	20	16				16	25.4	19.197



Manual(M6)	12	20	24	26.5	42.0656	31.7942	Manual(M6) Error in combined unrounded adjusted CO2 value, we calculate 265.8; Please revise
Auto(S6)	22	30	25	27.3832	39.0128	31.6255	Auto(S6) Error in Rounded Adjusted Highway CO2, we calculate 262; Error in Rounded Adjusted combin
Manual(M6)	21	30	24	25.2999	41.4024	30.6672	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	22	29	25	27.3832	39.0128	31.6255	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	22	31	25	26.4199	42.8586	31.9312	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	22	31	25	26.4199	42.8586	31.9312	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	21	30	24	25.2999	41.4024	30.6672	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	21	27	23	26.4935	37.7702	30.6054	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	21	32	25	25.7303	43.9687	31.6354	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	17	27	21	21.2	35.1	25.7972	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	17	25	20	20.5	33.5	24.8373	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	22	30	25	27.5	41.5	32.4219	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	22	30	25	27.5	41.5	32.4219	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	24	31	26	28.0549	42.473	33.1132	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	23	33	26	26.3044	44.5088	32.2378	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	19	27	22	23.9	37.1	28.456	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	24	33	27	29.9333	43.5096	34.8229	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	21	31	25	26.0527	41.2042	31.2185	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	24	32	27	29.5139	45.1099	34.9517	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	23	29	25	28.1	41.499	32.8768	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	24	34	28	28.8	46.2	34.6771	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	22	33	26	26.5556	44.9945	32.56	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	23	33	26	26.3044	44.5088	32.2378	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	24	31	26	28.0549	42.473	33.1132	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	23	33	26	26.3044	44.5088	32.2378	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	24	31	26	28.0549	42.473	33.1132	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	23	33	26	26.3044	44.5088	32.2378	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	30	40	34	37.9	56.8	44.5744	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	31	43	35	38.2	62.8	46.3746	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	22	31	25	27.0219	40.7879	31.8608	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	22	32	26	26.1361	42.9279	31.7195	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	20	28	23	23.9	37.3	28.5088	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	21	26	23	26.0779	36.3534	29.8782	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S6)	18	26	21	21.7	35.8	26.3745	Auto(S6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	20	26	23	25.7924	36.0745	29.5873	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S8)	20	29	23	24.1	22.4	23.3041	Auto(S8) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Manual(M6)	17	23	19	21.3	31.6	24.9612	Manual(M6) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.
Auto(S8)	20	24	21	25.1	33.1	28.1631	Auto(S8) Error in Rounded Adjusted combined CO2, we calculate 313; Please revise Verify as needed.

City	Model	Fuel	Unrd	Comb	Unr	Guzzler?	Air Aspir	IAir Aspir	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286					TC	Turbochar	AMS	Automate		6
29.8946	41.5209	34.2046					TC	Turbochar	AMS	Automated		6
20.8146	29.9953	24.1394					TC	Turbochar	M	Manual		6
20.891	28.1035	23.6187					TC	Turbochar	AMS	Automate		6
23.6355	30.6684	26.3554					TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508					TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049					TC	Turbochar	M	Manual		6
23.6355	30.6684	26.3554					TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508					TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508					TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049					TC	Turbochar	M	Manual		6
24.5044	32.5529	27.5721					TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508					TC	Turbochar	SA	Semi-Auto		8
18.3949	27.2332	21.5408					SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758					SC	Superchar	SA	Semi-Auto		8
e)(17.8058	27.5484	21.1758					SC	Superchar	SA	Semi-Auto		8
e)(17.8058	27.5484	21.1758					SC	Superchar	SA	Semi-Auto		8
13.1387	20.6025	15.6978	G				NA	Naturally	SA	Semi-Auto		8
19.9584	26.6824	22.5112					TC	Turbochar	SA	Semi-Auto		8
19.7289	28.2351	22.823					TC	Turbochar	SA	Semi-Auto		8
15.522	21.5458	17.7559					SC	Superchar	SA	Semi-Auto		8
18.74	27.62	21.9099					TC	Turbochar	SA	Semi-Auto		8
15.7409	23.3075	18.4339					NA	Naturally	AMS	Automate		7
15.8793	22.1836	18.2078					NA	Naturally	AMS	Automate		7
18.117	27.558	21.419					SC	Superchar	AMS	Automated		7
17.0438	26.023	20.1767					SC	Superchar	M	Manual		6
18.117	27.558	21.419					SC	Superchar	AMS	Automated		7
17.0438	26.023	20.1767					SC	Superchar	M	Manual		6
17.6699	25.953	20.6333					SC	Superchar	AMS	Automated		7
16.761	26.9697	20.2022					TC	Turbochar	AMS	Automate		7
16.761	26.9697	20.2022					TC	Turbochar	AMS	Automate		7
22.407	31.1674	25.6515					TC	Turbochar	AMS	Automate		6
22.407	31.1674	25.6515					TC	Turbochar	AMS	Automated		6
17.751	25.2021	20.4751					TC	Turbochar	M	Manual		6
11.2476	18.7327	13.7134	G				TC	Turbochar	SA	Semi-Auto		6
15.0109	24.4645	18.1706					TC	Turbochar	SA	Semi-Auto		8
11.5043	18.877	13.9574	G				TC	Turbochar	SA	Semi-Auto		6
14.0639	23.9773	17.2766	G				TC	Turbochar	SA	Semi-Auto		8
11.2476	18.7327	13.7134	G				TC	Turbochar	SA	Semi-Auto		6
11.5043	18.877	13.9574	G				TC	Turbochar	SA	Semi-Auto		6
8.4232	14.7698	10.4424	G				TC	Turbochar	AMS	Automate		7
10.6055	18.4729	13.1199	G				NA	Naturally	AMS	Automated		7
9.7957	16.2453	11.9264	G				NA	Naturally	AMS	Automated		7
13.4655	19.7573	15.718	G				NA	Naturally	AMS	Automated		6
Verify as needed	12.0883	19.9831	14.7021	G			NA	Naturally	AM	Manual		6
13.3954	19.7741	15.6701	G				NA	Naturally	AMS	Automated		6

Verify as needed	14.451	14.1465G	NA	Naturally	AM	Manual	6
CO2 we calculate 2973; Please revise Verify as needed	22.0202	29.5574	24.8746	TC	Turbochar	AMS	Automated
	27.8088	40.6616	32.4203	TC	Turbochar	M	Manual
	20.5408	29.7034	23.8517	TC	Turbochar	M	Manual
	22.2864	28.5683	24.7338	NA	Naturally	ASA	Semi-Auto
	21.7201	30.6767	25.0054	NA	Naturally	FM	Manual
	21.1383	28.6751	23.9738	TC	Turbochar	AMS	Automated
	27.8088	40.6616	32.4203	TC	Turbochar	M	Manual
	20.5408	29.7034	23.8517	TC	Turbochar	M	Manual
	21.2302	26.9749	23.4804	NA	Naturally	ASA	Semi-Auto
	21.8706	31.0367	25.2227	TC	Turbochar	AMS	Automated
	20.8232	31.7255	24.6324	TC	Turbochar	M	Manual
	17.4935	26.5716	20.6716	NA	Naturally	ASA	Semi-Auto
	16.9415	25.219	19.8774	NA	Naturally	ASA	Semi-Auto
	21.7634	30.1121	24.8658	TC	Turbochar	AMS	Automated
	29.8946	41.5209	34.2046	TC	Turbochar	AMS	Automated
ed CO2 we calculate 2973; Please revise Verify as needed	29.8946	41.5209	34.2046	TC	Turbochar	M	Manual
	23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto
	22.7343	32.7402	26.3594	NA	Naturally	FM	Manual
	19.278	26.8882	22.0917	TC	Turbochar	M	Manual
	24.2237	32.5108	27.3624	TC	Turbochar	AMS	Automated
	21.2839	30.8324	24.7304	TC	Turbochar	M	Manual
	23.7854	31.6043	26.7652	TC	Turbochar	AMS	Automated
	29.8946	41.5209	34.2046	TC	Turbochar	AMS	Automated
	23.1009	29.1554	25.4822	NA	Naturally	ASA	Semi-Auto
	24.3944	33.6309	27.8344	NA	Naturally	FM	Manual
	21.8931	32.6043	25.6912	TC	Turbochar	M	Manual
ed CO2 we calculate 2973; Please revise Verify as needed	23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto
	22.7343	32.7402	26.3594	NA	Naturally	FM	Manual
ulate Error in found; Justed combined CO2, we calculate AMS; Please revise/Verify as needed.	23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto
ed CO2 we calculate 2973; Please revise Verify as needed	22.7343	32.7402	26.3594	NA	Naturally	FM	Manual
	23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto
	22.7343	32.7402	26.3594	NA	Naturally	FM	Manual
	30.4633	40.2057	34.1916	TC	Turbochar	AMS	Automated
	30.8024	42.6219	35.1943	TC	Turbochar	M	Manual
	22.1078	30.6611	25.2814	NA	Naturally	ASA	Semi-Auto
	21.8993	32.1378	25.5642	NA	Naturally	FM	Manual
	19.7174	27.8048	22.6868	NA	Naturally	AMS	Automated
	20.6233	26.0617	22.7606	TC	Turbochar	SA	Semi-Auto
	18.1488	26.2617	21.0791	TC	Turbochar	M	Manual
	20.402	25.8545	22.5412	TC	Turbochar	SA	Semi-Auto
	19.649	28.9961	22.9829	TC	Turbochar	SA	Semi-Auto
	17.0411	22.7325	19.2048	NA	Naturally	ASA	Semi-Auto
	19.8843	23.7762	21.4655	SC	Superchar	SA	Semi-Auto

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Automated Manual with paddles)	Manual with paddles)	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	2-Wheel DDVW XV02.0U5N			5	DU	Diesel, ultr	
N	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	F	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	F	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	F	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
ounded unadjusted CO2 value, which calculate 4	ounded unadjusted CO2 value, which calculate 4		All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
ounded unadjusted CO2 value, which calculate 4	ounded unadjusted CO2 value, which calculate 4		All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDVW XV06.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XT03.03UG			5	DU	Diesel, ultr	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV02.0		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDBGT V08.0		10		GPR	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDNL XV06.0		10		GPR	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDNL XV06.0		10		GPR	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV05.0		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XV05.0		10		GP	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV05.0		10		GP	Gasoline (I	

N	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (I
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.	10		GP	Gasoline (I
Y	N	F	2-Wheel DDVWXV02	10		G	Gasoline (I
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXV03.	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	A	All Wheel IDAD XV02.	10		GP	Gasoline (I
Automated Manual with paddles)			2-Wheel DDAD XV02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDAD XV02.0	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.	10		GP	Gasoline (I
N	N	F	2-Wheel DDVWXJ02.	10		GP	Gasoline (I
Y	N	A	All Wheel IDVWXJ02.	10		GP	Gasoline (I
Y	N	A	All Wheel IDAD XT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel IDVWXT03	10		GP	Gasoline (I
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F



MPG (Unleaded, Recommended)	Not exempt			
MPG (15 ppm maximum)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt		85	15
MPG (15 ppm maximum)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt	81	7	
MPG (15 ppm maximum)	Not exempt	81	7	
MPG (Unleaded, Recommended)	Not exempt	81	7	
MPG (Unleaded, Recommended)	Not exempt	81	7	
MPG (Unleaded, Recommended)	Not exempt	94	13	
MPG (Unleaded, Recommended)	Not exempt	94	13	
MPG (Unleaded, Recommended)	Not exempt	94	13	
MPG (Unleaded, Recommended)	Not exempt	94	13	
MPG (Unleaded, Recommended)	Not exempt	77	11	
MPG (15 ppm maximum)	Not exempt		94	15
MPG (15 ppm maximum)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (15 ppm maximum)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (15 ppm maximum)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (15 ppm maximum)	Not exempt	92	33	
MPG (15 ppm maximum)	Not exempt	92	33	
MPG (Unleaded, Recommended)	Not exempt	92	33	
MPG (Unleaded, Recommended)	Not exempt	92	33	
MPG (15 ppm maximum)	Not exempt	102	16	
MPG (15 ppm maximum)	Not exempt	102	16	
MPG (Unleaded, Recommended)	Not exempt	102	16	
MPG (Unleaded, Recommended)	Not exempt	102	16	
MPG (Unleaded, Recommended)	Truck			
MPG (Unleaded, Recommended)	Truck			
MPG (Unleaded, Recommended)	Truck			
MPG (15 ppm maximum)	Truck			
MPG (Unleaded, Recommended)	Truck			
MPG (Unleaded, Recommended)	Truck			

Annual Fuel Economy	EPA Calculated	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel)	Low'd City	Low'd Hwy	Low'd Cor	City2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C					
1700	1700	corrected CO2 values					
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values					
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v					
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unround					
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and					
2200	2200						
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected					
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and					
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and					
2200	2200						
2050	2050	corrected forward speeds to 8, for this CVT trans					
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched					
2600	2600						
2700	2700	corrected unadj unrnd city CO2 value					
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value					
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrd city CO2 value corrected					
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con					
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c					
2500	2500	corrected unadj unrounded highway and combined values					
3150	3150	CO2 corrections					
2600	2600	CO2 corrections					
3150	3150	CO2 corrections					
3150	3150	corrected city CO2 value, typo					
2700	2700	corrected city unadj unrdn CO2					
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una					
2700	2700	corrected city unadj unrounded CO2					
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una					
2700	2700	corrected unadj and adj CO2 values					
2850	2850	CO2 corrections					
2850	2850	CO2 corrections					
2200	2200	CO2 corrections					
2200	2200	CO2 corrections					
2850	2850						
4050	4050	8 13 10 9.5					
3150	3150						
4050	4050	8 14 10 10.3					
3350	3350						
4050	4050	8 13 10 9.5					
4050	4050	8 14 10 10.3					
5700	5700	corrected lock out to "yes" and AMS.					
4400	4400	lock up to YES.					
4750	4750	adjusted release date, lock up to YES.					
3550	3550	corrected fuel consumption per ASTM rounding procedure					
3800	3800						
3550	3550	corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure					



4050	4050
1800	1800
2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400 corrected CO2 values
2150	2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g
2150	2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u
2400	2400 annual fuel cost corrected, post release 10 amd AMS used, corrected highway value from 28 t
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400 CO2 corrections, fuel spending corrected to \$400
2300	2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre
2700	2700 update after Verify release 10
2850	2850 UPDATE after Verify release 10
2300	2300 CO2 corrections
1700	1700 corrected CO2 values
1700	1700 corrected CO2 values
2050	2050 early label, update after Verify release 10, CO2 corrections
2050	2050 update after Verify release 10 issued, CO2 comb correction
2600	2600 CO2 corrections
2100	2100 CO2 corrections
2300	2300 early label, upate after Verify release 10
2100	2100 corrected unadjusted unrounded CO2 highway and conbined values and combined adjusted w
1700	1700 corrected CO2 values
2150	2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6
1900	1900 FE and GHG ratings corrected to 7
2200	2200 CO2 corrections
1700	1700 corrected CO2 values
2050	2050 early label, update after Verify release 10, CO2 corrections
2050	2050 update after Verify release 10 issued, CO2 corrections
1750	1750 CO2 corrections
1700	1700 corrected CO2 values
2050	2050 early label, update after Verify release 10, CO2 corrections
2050	2050 update after Verify release 10 issued, CO2 corrections
1700	1700
1650	1650
2150	2150 CO2 corrections
2050	2050 CORRCTED 5 YEAR FUEL SAVINGS, CO2 corrections
2500	2500 CO2 correction
2500	2500 corrected CO2 values
2700	2700 CO2 corrections
2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections
2500	2500 CO2 corrections
3000	3000
2700	2700 CO2 corrections

	Hwy2 Unit	Comb2 Unit	Hwy2 Unit	Comb2 Unit	Range2 - Fuel2 Usr	Fuel2 Usr	Fuel2 Unit	Fuel2 Unit
02								

value  
ed CO2 value  
gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
gallons per 100 value...these values were switched

sumption to 6.2 per ASTM rounding procedure  
ity and highway CO2 values

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E-MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E-MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E-MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E-MPG	miles per g

roup

nrounded highway and combined CO2 values

o 29 MPG

ed MPG value

nd corresponding 5-cycle values

cted calculated values

hole CO2 value

Relative Fuel	CO2	CO2	CO2	CO2	Fuel2 EPA	Description	Intake Val	Exhaust V	Carline CI	Carline CI
						SIDI;	2	27	Small Stati	
							2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI; Unde	2	25	Midsize Ca	
						SIDI; Unde	2	26	Large Cars	
						SIDI;	2	26	Large Cars	
						SIDI;	2	27	Small Stati	
						SIDI;	2	231	Small SUV 4WD	
						SIDI;	2	233	Standard SUV 4W	
							2	233	Standard SUV 4W	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	23	Subcompa	
						SIDI;	2	21	Two Seate	
4650	794	469	648	4650		SIDI;	2	23	Subcompa	
						FFV;	2	25	Midsize Ca	
4650	794	469	648	4650		SIDI;	2	24	Compact C	
						FFV;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
4650	794	469	648	4650		FFV;	2	23	Subcompa	
4650	794	469	648	4650		FFV;	2	23	Subcompa	
							2	21	Two Seate	
							2	21	Two Seate	
							2	21	Two Seate	
						SIDI;	2	21	Two Seate	
						SIDI;	2	21	Two Seate	
						SIDI;	2	21	Two Seate	

SIDI;	2	21	Two Seate
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	23	Subcompa
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	1	15	Midsize Ca
	1	15	Midsize Ca
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
SIDI;	2	25	Midsize Ca
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
car	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
car	Derived 5-cycle label	6/22/2012	11296	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11488	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11489	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	11506	N	N	
car	economy/vehicle specific 5-cycle	6/20/2012	11507	N	N	XX MPG retained;
car	economy/vehicle specific 5-cycle	6/20/2012	11508	N	N	XX MPG retained;
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
car	Derived 5-cycle label	4/26/2012	11490	N	N	
	Vehicle Specific 5-cycle	7/11/2012	11319	N	N	
D	Derived 5-cycle label	6/11/2012	11509	N	N	
D	Vehicle Specific 5-cycle	7/18/2012	11511	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11510	N	N	
car	Vehicle Specific 5-cycle	7/11/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11325	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11326	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11314	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11514	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11516	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	8/30/2012	10181	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle	8/30/2012	10185	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle	8/30/2012	10183	N	N	
car	Vehicle Specific 5-cycle	8/30/2012	10184	N	N	
car	Vehicle Specific 5-cycle	7/11/2012	11087	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	11091	N	N	
car	Vehicle Specific 5-cycle	4/19/2013	11089	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	10647	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	10237	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	10648	N	N	

car	Vehicle Specific 5-cycle	6/20/2012	10238		N	N
car	Derived 5-cycle label	7/19/2012	10750		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187		N	N
car	Derived 5-cycle label	6/25/2012	10707		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11525		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10751		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373		N	N
car	Derived 5-cycle label	7/30/2012	10277		N	N
car	Derived 5-cycle label	6/25/2012	10708		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10186		N	N
car	Vehicle Specific 5-cycle	7/25/2012	11044		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10532		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10534		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527		N	N
car	Derived 5-cycle label	6/22/2012	11295		N	N
car	Derived 5-cycle label	6/25/2012	11299		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11530		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11531		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531		N	N
car	Vehicle Specific 5-cycle	6/18/2012	11372		N	N
car	Derived 5-cycle label	6/22/2012	11294		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11532		N	N
car	Derived 5-cycle label	6/25/2012	11298		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535		N	N
cars	Derived 5-cycle label	6/25/2012	11301		N	N
cars	Derived 5-cycle label	6/25/2012	11297		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11534		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11536		N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11539		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11547		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554		N	N
	Derived 5-cycle label	6/18/2012	11556		N	N
	Vehicle Specific 5-cycle	6/11/2012	11558		N	N
	Derived 5-cycle label	6/11/2012	11557		N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563		N	N
D	Derived 5-cycle label	6/25/2012	10319		N	N
D	Derived 5-cycle label	6/25/2012	11559		N	N

Suppressor	Police/Em	Comment	Cyl Deact	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Var Valve	Energy St
N	N	Test Group	N		Y	CONTINU	CN			
N	N		N		N		N			
N	N	Test Group	N		Y	CONTINU	CN			
N	N	ENGINE CC	N		Y	CONTINU	CN			
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	Intake and	N			
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N	Engine coc	N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(N			
N	N		N		N		N			
N	N		N		Y	Continuou	N			
N	N		N		Y	Continuou	N			
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y		Multi-lobe	
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y		Multi-lobe	
N	N	ENGINE CC	N		Y	CONTINU	CN			
N	N	ENGINE CN			Y	CONTINU	(N			
N	N		N		Y	CONTINU	CN			
N	N	Continenta	N		Y	INLET AN	IN			
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y		Multi-lobe	
N	N	Continenta	N		Y	INLET AN	IN			
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y		Multi-lobe	
N	N	Continenta	N		Y	INLET AN	IN			
N	N	Continenta	N		Y	INLET AN	IN			
N	N	CHARGE A	N		Y	INLET AND	N			
N	N		Y	ELECTRO	Y	HYDRAUL	N			
N	N		Y	ELECTRO	Y	HYDRAUL	N			
N	N	ENGINE CN			Y	INLET AN	IN			
N	N	ENGINE CN			Y	INLET AN	IN			
N	N	ENGINE CN			Y	INLET AN	IN			



N	N	ENGINE CN	Y	INLET ANIN	
N	N	N	N	N	
N	N	N	Y	position ofN	
N	N	N	N	N	
N	N	N	Y	position of N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET CONN	
N	N	N	Y	position ofN	
N	N	N	N	N	
N	N	N	Y	position ofN	
N	N	N	Y	INLET CONN	
N	N	N	Y	position ofN	
N	N	N	Y	position ofN	
N	N	N	Y	position ofN	
N	N	N	Y	position ofN	
N	N	N	Y	CONTINU CN	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	INLET CONN	
N	N	N	Y	INLET CONN	
N	N	ENGINE CN	Y	CONTINU CN	
N	N	ENGINE CCN	Y	CONTINU CN	
N	N	ENGINE CCN	Y	CONTINU CN	
N	N	N	Y	position ofN	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	position ofN	
N	N	N	N	N	
N	N	N	Y	INLET CONN	
N	N	N	Y	INLET CONN	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	INLET CONN	
N	N	N	Y	INLET CONN	
N	N	SCR EquiprN	N	N	
N	N	SCR EquiprN	N	N	
N	N	N	Y	INLET CONN	
N	N	N	Y	INLET CONN	
N	N	N	Y	Electronic N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	INTAKE / EN	
N	N	V6 CYLIND N	Y	MECANICAN	Battery(s)

Device Desc	Battery #	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit
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toll and hydraulically adjusted.

1. The objective of this project is to develop a hydraulic system for the control of the hydraulic system. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle.

STMENT

E / MECHANICAL-HYDRAULIC

1. The objective of this project is to develop a hydraulic system for the control of the hydraulic system. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle.

E / MECHANICAL-HYDRAULIC

1. The objective of this project is to develop a hydraulic system for the control of the hydraulic system. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle.

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

6. The objective of this project is to develop a hydraulic system for the control of the hydraulic system. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle.

7. The objective of this project is to develop a hydraulic system for the control of the hydraulic system. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle.

8. The objective of this project is to develop a hydraulic system for the control of the hydraulic system. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle. The system will be designed to control the hydraulic system of the vehicle.

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
AL HYDRAULIC

YDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC

controlled and hydraulically adjusted  
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y controlled and hydraulically adjusted

YDRAULIC

YDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

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YDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

RAULICALLY AND CONTROLLED ELECTRONICALLY

AMS

1 NiMH

288

6

21.5 On-Board

es(2)ine d gear at this loer, FGT grea tter by lin 40C, hrag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km  
 es(2)ine d gear at this loer, FGT grea tter by lin 40C, hrag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine d gear at this loer, FGT grea tter by lin 40C, hrag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine d gear at this loer, FGT grea tter by lin 40C, hrag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Other BRAKE PEBoth N

1Other

2017-FFP 004353

		GDI	Spark Ignit	N	10W60 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		MFI	Multipoint/	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		MFI	Multipoint	N	10W40 / V
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W-40 VW
		GDI	Spark Ignit	N	5W-40 VW
		GDI	Spark Ignit	N	5W40 / VW
		CRDI	Common FN	N	5W40
		CRDI	Common FN	N	5W40
		MFI	Multipoint	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		GDI	Spark IgnitN	N	5W40
		GDI	Spark IgnitN	N	5W40
		GDI	Spark IgnitN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		MFI	Multipoint	N	5W40 VW
		MFI	Multipoint	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		MFI	Multipoint	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		CRDI	Common FN	N	5W40
		CRDI	Common FN	N	5W40
		MFI	Multipoint	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		CRDI	Common F	N	5W40 VW
		CRDI	Common F	N	5W40 VW
		MFI	Multipoint	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common F	N	5W30 VW
		GDI	Spark Ignit	N	5W40 VW
3 PHASE CI	34	GDI	Spark IgnitN	N	5W40 VW

Stop/StartStop/StartTrans in FETrans as IModel TypCharge De Charge De Charge SuCharge SuEPA Calcul

N	No	Auto(AM-SAuto(AM-S
N	No	Auto(AM-SAuto(AM-S
N	No	Manual(M Manual(M€A3 frt man
N	No	Auto(AM-SAuto(AM-SA3 quattro
N	No	Auto(AV-SAuto(AV-S
N	No	Auto(S8) Auto(S8)
N	No	Manual(M Manual(M€
N	No	Auto(AV-SAuto(AV-S
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Manual(M Manual(M€
N	No	Auto(AV-SAuto(AV-S Audi A6 Cv
N	No	Auto(S8) Auto(S8)
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N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Audi Q7
N	No	Auto(S8) Auto(S8)
N50700	No	Auto(AM-SAuto(AM-S
N50700	No	Auto(AM-SAuto(AM-S
N	No	Auto(AM-SAuto(AM-S
N	No	Manual(M Manual(M
N	No	Auto(AM-SAuto(AM-S
N	No	Manual(M Manual(M€
N	No	Auto(AM-SAuto(AM-S
N50700	No	Auto(AM-SAuto(AM-S
N50700	No	Auto(AM-SAuto(AM-S
N	No	Auto(AM-SAuto(AM-STT Coupe c
N	No	Auto(AM-SAuto(AM-STT Coupe
N	No	Manual(M Manual(MTTRS
N	No	Auto(S6) Auto(S6)
N50700	No	Auto(S8) Auto(S8)
N	No	Auto(S6) Auto(S6)
N50700	No	Auto(S8) Auto(S8)
N	No	Auto(S6) Auto(S6)
N	No	Auto(S6) Auto(S6)
N50500	No	Auto(AM-SAuto(AM-S
N50700	No	Auto(AM-SAuto(AM-S
N50700	No	Auto(AM-SAuto(AM-S
N50500	No	Auto(AM-SAuto(AM-S
N50500	No	Manual(M€Manual(M€Gallardo C
N50500	No	Auto(AM-SAuto(AM-S



N 50500	No	Manual(M Manual(M Gallardo S
N	No	Auto(AM-SA Auto(AM-S
N	No	Auto(AM-SA Auto(AM-S
N	No	Manual(M Manual(M
N	No	Manual(M Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Manual(M Manual(M
N	No	Auto(AM-SA Auto(AM-S
N	No	Manual(M Manual(M
N	No	Manual(M Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-SA Auto(AM-S
N	No	Manual(M Manual(M CC M6
N	No	Auto(S6) Auto(S6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-SA Auto(AM-S
N	No	Auto(AM-SA Auto(AM-S
N	No	Manual(M Manual(M Jetta Sport
N	No	Auto(S6) Auto(S6)
N	No	Manual(M Manual(M
N	No	Manual(M Manual(M
N	No	Auto(AM-SA Auto(AM-S
N	No	Manual(M Manual(M
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N	No	Auto(AM-SA Auto(AM-S
N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M Manual(M
N	No	Manual(M Manual(M
N	No	Manual(M Manual(M Jetta Sport
N	No	Auto(S6) Auto(S6)
N	No	Manual(M Manual(M
N	No	Auto(AM-SA Auto(AM-S
N	No	Manual(M Manual(M Jetta Sport
N	No	Auto(S6) Auto(S6)
N	No	Manual(M Manual(M
N	No	Auto(AM-SA Auto(AM-S
N	No	Auto(S6) Auto(S6) Tiguan for
N	No	Manual(M Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Touareg H

Model	Year	Make	Model	EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
	30.8			6	6 DAD XV02.0	7			
	46.2			9	8 DVW XV02	5			
	30.4			6	6 DAD XV02.0	7			
	30.9			6	6 DAD XV02.0	5			
	35.2			7	7 DAD XV02.	5			
	30.8			6	6 DAD XV02.0	5			
	33.2			7	7 DAD XV02.0	5			
	35.2			7	7 DAD XV02.	5			
	30.8			6	6 DAD XV02.0	5			
	30.8			6	6 DAD XV02.0	5			
	33.2			7	7 DAD XV02.0	5			
	36.9			7	7 DAD XV02.0	5			
	30.8			6	6 DAD XV02.0	5			
	28.1			5	5 DAD XJ03.0	5			
	27.5			5	5 DAD XJ03.0	5			
	27.5			5	5 DAD XJ03.0	5			
	27.5			5	5 DAD XJ03.0	5			
	19.3			3	3 DVW XV06.	5			
	29.5			6	6 DAD XV02.0	5			
	28.8			6	6 DAD XT02.0	5			
	22.9			4	4 DAD XT03.	5			
	28.1			5	4 DAD XT03.	5			
	23			4	4 DAD XV04.0	5			
	22.6			4	4 DAD XV04.0	5			
	26.9			5	5 DAD XJ03.0	5			
	23.5			5	5 DAD XJ03.0	5			
	26.9			5	5 DAD XJ03.0	5			
	23.5			5	5 DAD XJ03.0	5			
	26.4			5	5 DAD XJ03.0	5			
	25.5			5	5 DAD XV04.0	5			
	25.5			5	5 DAD XV04.0	5			
	33.3			7	7 DAD XV02.0	5			
	33.3			7	7 DAD XV02.	5			
	25.6			5	5 DAD XV02.0	5			
	17.2			2	2 DBEXV06.	5			
	23.6			4	4 DAD XV04.0	5			
	17.4			2	2 DBEXV06.	5			
	21.8			4	4 DAD XV04.0	5			
	17.2			2	2 DBEXV06.	5			
	17.4			2	2 DBEXV06.	5			
	12.6			1	1 DBGTV08.0	5			
	16.4			2	2 DNL XV06.	5			
	14.5			1	1 DNL XV06.	5			
	19.4			3	3 DAD XV05.	5			
	17.4			3	3 DAD XV05.	5			
	19.3			3	3 DAD XV05.	5			

16.1		2	2DAD XV05.	5
43.7		8	7DVWXV02	5
31.8		6	6DVWXV02.	7
43.4		8	7DVWXV02	5
30.7		6	6DVWXV02	7
31.6		6	6DVWXV02	7
31.9		6	6DVWXV02.	7
31.5		6	6DVWXV02.	7
43.4		8	7DVWXV02	5
30.7		6	6DVWXV02.	7
30.3		6	6DVWXV02.	7
32.3		6	6DVWXV02.	7
31.8		6	6DVWXV02.	7
25.8		5	5DVWXV03.	5
24.8		5	5DVWXV03.	5
32.4		6	6DVWXV02.	5
46.2		9	8DVWXV02	5
46		9	8DVWXV02	5
33.1		7	7DVWXV02.	7
32.2		7	7DVWXV02.	7
28.5		5	5DAD XV02.	5
34.8		7	7DAD XV02.(	7
31.2		6	6DAD XV02.(	7
35		7	7DVWXV02.	7
46.2		9	8DVWXV02	5
32.9		6	6DVWXV02.	5
34.7		7	7DVWXV02.	5
32.6		7	7DVWXV02.	7
46		9	8DVWXV02	5
33.1		7	7DVWXV02.	7
32.2		7	7DVWXV02.	7
44.2		8	7DVWXV02	5
46		9	8DVWXV02	5
33.1		7	7DVWXV02.	7
32.2		7	7DVWXV02.	7
44.6		9	8DVWXV02.	5
46.4		9	8DVWXV02.	5
31.9		6	6DVWXV02.	7
31.7		7	7DVWXV02.	7
28.5		6	6DVWXV03.	5
29.9		6	6DVWXJ02.	5
26.4		5	5DVWXJ02.	5
29.6		6	6DVWXJ02.	5
23.3		6	5DADXT03.(	5
25		4	4DVWXT03	5
28.2		5	5DVWXT03.	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DADXV02.0 5

DADXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

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	8650	768	452	625	681
2600		350	260	310	272
100		401	291	351	334.3
2600		361	248	310	281.3
2400		430	298	371	350.8
850		396	310	358	323.7
850		408	289	354	335.2
	400	421	310	371	332
2600		361	248	310	281.3
	400	430	298	371	350.8
100		418	329	378	335.4
100		403	283	349	327.2
100		425	279	360	346.3
	1900	507	334	429	419
	2650	523	351	446	434
100		405	257	338	321
3100		336	243	294	259.8
3100		338	241	294	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
	1400	460	330	402	372
1100		379	271	331	295.1
100		416	287	358	340.4
1100		372	280	331	300.9
3100		336	243	294	259.8
850		381	299	344	315
2100		361	262	316	307
600		403	272	344	333.9
3100		338	241	294	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
2850		348	256	306	270
3100		338	241	294	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
3100		331	240	290	268
3350		330	239	289	266
850		401	289	351	328.2
1350		391	275	339	339.6
	900	449	319	390	372
	900	430	342	390	339.6
	1900	484	336	417	407
	900	435	344	394	343.7
	900	517	351	442	422
	3400	520	391	462	416
	1900	447	372	413	354

Model	CO2-Hwy	CO2-City	CO2-Comb	CO2-PHEV 240V	CO2-PHEV 120V	City PHEV	Total PHEV
	232	287.6	431.8	318.9	381		
	171.2	219.9	335.7	242.8	293.9		
	220	291.5	442.5	295.6	376.4		
	239	286.3	442	316	385.3		
	199.8	251.6	373.3	303.6	341.9		
	218.7	288.6	436.9	296.8	373.9		
	202.1	267.2	397.1	276.4	342.8		
	199.8	251.6	373.3	303.6	341.9		
	218.7	288.6	436.9	296.8	373.9		
	218.7	288.6	436.9	296.8	373.9		
	202.1	267.2	397.1	276.4	342.8		
	189	240.2	360	272	320.4		
	218.7	288.6	436.9	296.8	373.9		
	233	315.8	481.7	326	411.6		
	238.7	323.9	498	320.9	418.4		
	238.7	323.9	498	320.9	418.4		
	238.7	323.9	498	320.9	418.4		
	346	463.2	675	430	564.8		
	238	300.7	444	333	394		
	230	300.4	449.6	314.3	388.7		
	296	386.8	573	412	500.1		
	260	362.3	541	369	463.6		
	296	389.5	562.3	379.3	480		
	307	392.8	558	398	486		
	248	329.4	488	321	412.9		
	266	363.4	440.6	355	402.1		
	248	329.4	488	321	412.9		
	266	363.4	440.6	355	402.1		
	256	335.8	500.4	340.8	428.5		
	251.6	348.2	530.4	329.7	440.1		
	251.6	348.2	530.4	329.7	440.1		
	209.9	266.1	394.5	284.4	345		
	209.9	266.1	394.5	284.4	345		
	259	347	498.9	350.4	432.1		
	361	519.4	787	474	646		
	265	375.6	590	364	488.3		
	359	513	768	469	634		
	288	410.1	638	370	517.4		
	361	519.4	787	474	646		
	359	513	768	469	634		
	495	709.5	1050.2	598.8	847.1		
	353	547.2	836	481	676.3		
	418	612.2	902	547	742		
	349	460.7	657	447	563		
	370	515.8	734	511	633		
	348	462.4	660	446	564		



391	550.5	768	452	625
184	232.4	350	260	310
211.2	278.9	401	290.6	351.3
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.8
227.6	280.5	396.3	310.3	358.2
207.2	277.6	407.6	288.8	354.1
220.9	282	421	310	371
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.8
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
202.5	281.6	425.2	279.3	359.5
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	404.7	256.6	338.1
171.2	219.9	335.7	242.8	293.9
170	220.5	337.9	241.2	294.4
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
240	312.6	459.5	330.5	401.5
203.2	253.7	379.2	271.3	330.6
215.5	284.2	415.9	287	357.9
196.7	254	372	280.4	330.8
171.2	219.9	335.7	242.8	293.9
214	269.6	381.3	298.8	344.2
192	255.2	360.5	262	316.2
197.2	272.4	403.3	271.8	344.1
170	220.5	337.9	241.2	294.4
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
181	230	347.7	256	306.4
170	220.5	337.9	241.2	294.4
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.7
206.8	279.8	391.3	275	339
238	311.7	449	319	390.5
244.4	296.8	429.9	341.3	390
248	335.5	484	336	417.4
246.1	299.8	434.7	343.6	394
248	343.7	517	351	442.3
281	355.3	520.1	390.6	461.8
267	314.8	446.9	371.8	413.1

City	Highway	Cons (mpg)	Distance (miles)	Comb Vol	Higher Final Label	EPA_FUEL	EPA_GHG	EPA_AMT	EPA_INCR
N				4.2		4.2			
N				2.9		2.9			
N				4.2		4.2			
N				4.2		4.2			
N				3.8		3.8			
N				4.2		4.2			
N				3.8		3.8			
N				3.8		3.8			
N				4.2		4.2			
N				4.2		4.2			
N				3.8		3.8			
N				3.6		3.6			
N				4.2		4.2			
N				4.5		4.5			
N				4.8		4.8			
N				4.8		4.8			
N				4.8		4.8			
N				6.2		6.2			
N				4.3		4.3			
N				4.3		4.3			
N				5.6		5.6			
N				4.5		4.5			
N				5.6		5.6			
N				5.6		5.6			
N				4.8		4.8			
N				5		5			
N				4.8		4.8			
N				5		5			
N				4.8		4.8			
N				5		5			
N				5		5			
N				3.8		3.8			
N				3.8		3.8			
N				5		5			
N				7.1		7.1			
N				5.6		5.6			
N				7.1		7.1			
N				5.9		5.9			
N				7.1		7.1			
N				7.1		7.1			
N				10		10			
N				7.7		7.7			
N				8.3		8.3			
N				6.2		6.2			
N				6.7		6.7			
N				6.2		6.2			

N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8





UNRIEPA_UNRIEPA_ADJ_EPA_PHEVLabel	Submitter
2007	2007

[illegible]

[illegible]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 8/6/2012 12:02:02 PM  
**Subject:** RE: VW Group - Certificate Request for 2013 Audi Q5 Hybrid  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Hello Jim,

The projected sales for 2013 model year Q5 hybrid are correct in the application. The market introduction for the 2012 model year Q5 hybrid was cancelled for reasons unknown to me at this time.

Also, we did finally receive the 2013 certificate in from Verify as referenced by Mike Giles last week.

Thanks,

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, August 02, 2012 6:28 PM  
To: Rodgers, William (EEO)  
Subject: Re: VW Group - Certificate Request for 2013 Audi Q5 Hybrid

Bill, Was looking at the projected sales in the Part 1. Are these numbers correct? What were the volumes from 2012MY?

2013 MY

Projected Sales by Carline, Test Weight and Transmission Configuration

## Ex. 4 - CBI

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency



(734) 214-4946  
snyder.jim@epa.gov

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: Stephen Healy/AA/USEPA/US@EPA, "Giles, Michael (EEO)" <michael.giles@vw.com>  
Date: 07/26/2012 10:58 AM  
Subject: VW Group - Certificate Request for 2013 Audi Q5 Hybrid

Hello Jim,

We have submitted a Certificate Request for Audi test group DADXT02.0HUB, Audi Q5 Hybrid. The Initial Application and required manufacturer confirmatory tests have been submitted to Verify. Please review and process a Certificate of Conformity by August 3rd if possible. You can contact me directly if there are any questions about these submissions.

Best regards,

Bill Rodgers  
Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.  
Engineering and Environmental Office  
Auburn Hills, MI  
(248) 754-4219  
william.rodgers@vw.com

**To:** David Good/AA/USEPA/US@EPA[]  
**From:** "Johnson, Stuart (EEO)"  
**Sent:** Mon 8/6/2012 5:08:29 PM  
**Subject:** VW Porsche Aggregation Meeting

Hello Dave,

Good to talk to you today. I wanted to confirm a meeting with EPA on Thursday August 9th @ 3:30 pm to discuss the implications of the merger of VW and Porsche. We would like to discuss all aspects of the merger as it pertains to regulatory requirements but in particular we would like to discuss the merger with regards timing of aggregating for the GHG regulation. When we review the regulation there seems to be uncertainty regarding when VW and Porsche will have to merge their fleets.

Thank you and looking forward to the discussion this Thursday.

Best Regards,

Stuart

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; eonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; liver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; tuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]

**Cc:** CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA[]

**From:** CN=David Good/OU=AA/O=USEPA/C=US

**Sent:** Tue 8/7/2012 4:06:59 PM

**Subject:** VW/EPA mtg - Merger of VW & Porsche

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; eonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; liver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; tuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]

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**From:** CN=David Good/OU=AA/O=USEPA/C=US

**Sent:** Tue 8/7/2012 4:06:59 PM

**Subject:** VW/EPA mtg - Merger of VW & Porsche

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; eonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; liver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; tuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]

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**From:** CN=David Good/OU=AA/O=USEPA/C=US

**Sent:** Tue 8/7/2012 4:06:59 PM

**Subject:** VW/EPA mtg - Merger of VW & Porsche

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; eonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; liver.schmidt@vw.com;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; tuart.johnson@vw.com;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]

**Cc:** CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA[]

**From:** CN=David Good/OU=AA/O=USEPA/C=US

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**From:** CN=David Good/OU=AA/O=USEPA/C=US

**Sent:** Tue 8/7/2012 4:06:59 PM

**Subject:** VW/EPA mtg - Merger of VW & Porsche

**To:** "Johnson, Stuart (EEO)" [Stuart.Johnson@vw.com]  
**Cc:** CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Tue 8/7/2012 4:13:44 PM  
**Subject:** Re: VW Porsche Aggregation Meeting - Thurs (8/9/12) at 3:30 PM

Stuart,

I included you, Len and Oliver when I scheduled the Thurs 3:30 meeting---didn't know exactly who would be coming. Please let me know if you think you'll need more than 1.5 hours.

[I invited some of our new engineers---and cc'd a few EPA folks that I don't expect will need to come.]

If possible, please send use the presentation or a one-pager ahead of time.

Also, for some reason I don't have your phone number.

See you Thursday.

Dave

**From:** "Johnson, Stuart (EEO)" <Stuart.Johnson@vw.com>  
**To:** David Good/AA/USEPA/US@EPA  
**Date:** 08/06/2012 01:08 PM  
**Subject:** VW Porsche Aggregation Meeting

Hello Dave,

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Thank you and looking forward to the discussion this Thursday.

Best Regards,

Stuart



**To:** "Johnson, Stuart (EEO)" [Stuart.Johnson@vw.com]  
**Cc:** CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
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**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** Linc Wehrly/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Johnson, Stuart (EEO)"  
**Sent:** Tue 8/7/2012 4:33:53 PM  
**Subject:** RE: VW Porsche Aggregation Meeting - Thurs (8/9/12) at 3:30 PM  
[image001.gif](#)

Hello Dave,

Got the invitation and thanks for setting up the meeting. For future reference my phone number is 248-754-4208.

See you on Thursday and best regards.

Stu

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Tuesday, August 07, 2012 12:14 PM  
To: Johnson, Stuart (EEO)  
Cc: Linc Wehrly; Jim Snyder  
Subject: Re: VW Porsche Aggregation Meeting - Thurs (8/9/12) at 3:30 PM

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Best Regards,

Stuart

**To:** David Good/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Tue 8/7/2012 6:02:08 PM  
**Subject:** Accepted: VW/EPA mtg - Merger of VW & Porsche

**To:** David Good/AA/USEPA/US@EPA[]  
**From:** "Schmidt, Oliver (EEO)"  
**Sent:** Tue 8/7/2012 6:16:58 PM  
**Subject:** Accepted: VW/EPA mtg - Merger of VW & Porsche

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Tue 8/7/2012 7:23:08 PM  
**Subject:** VW Group - Jetta Hybrid Application for Certification

Hello Jim,

We have submitted to Verify the Initial Application for Certification for the 2013 VW Jetta Hybrid. Please note that we are requesting a Conditional Certificate for this test group due to the tight schedule between market introduction and pending EPA confirmatory testing. Please review this information at your earliest convenience and contact me directly should you have any questions.

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Tue 8/7/2012 10:12:47 PM  
**Subject:** re: 2013 FE Guide - Errors in EPA's data base as of Aug 7, 2012 with new macro;  
please make corrections by August 15 if possible  
VW\_Group\_2013 FE Guide-all rel dates-no-sales-8-7-2012.xlsx

Richard,

I hope your vacation is going well and you don't open this until you get back to the office.

,

I corrected the macro so the rounded adjusted combined CO2 error check is now accurate. Attached are the data in Verify as 10 AM on Aug 7, 2012. Please make any needed corrections in the next two weeks if possible. The last day to make corrections for the Printed Guide is August 29, 2012.

Note that I didn't have time to double check and clean up the error messages in column 1& 2 of the spreadsheet--errors are pretty much as flagged by the macro.

As a reminder, please start emailing me an excel spreadsheet with any 2013 alternative fuel/new technology placeholder vehicles (2013 vehicles for which the fuel economy will not be available by August 29, 2012). For more information about sending us your placeholder vehicles, please see Enclosure 2, Section 3 of the recent EPA guidance letter which was sent out on Monday (CD-12-10 Subject: Fuel Economy Label Information for 2013 Model Year).

I'll include my notes from previous emails for your convenience.

As usual, thanks for your help.

Dave

----- Forwarded by David Good/AA/USEPA/US on 08/07/2012 04:38 PM -----

**From:** David Good/AA/USEPA/US  
**To:** Manufacturers fuel economy contact folks  
**Date:** 08/07/2012 09:09 AM  
**Subject:** 2013 FE Guide - EPA error in the data which I sent you on Friday Aug 3, 2012 - rounded adjusted combined CO2

Heads up to all:

There is an error in the EPA macro when checking the accuracy of the adjusted combined CO2 values for labels calculated with the derived 5-cycle method.

The macro use the weighted average of the unrounded city and highway values (55%/45% weighting)--- with the result rounded to the whole gpm value. It should have use the weighted average of the city & highway CO2 values rounded to tenths of a gram/mile, ref 40 CFR 600.210-12(c)(2) which references

paragraphs 600.210-12(a)(2)(i)(B) and (a)(2)(ii)(B).

Hopefully, this rounding error won't affect very many labels in the data which I sent out to manufacturers on Friday August 3rd.

I'll correct the macro and send you another spreadsheet this afternoon.

Dave

re: 2013 FE Guide - Errors in EPA's Verify data base as of 8/1/2012; please make corrections by Aug 15, 2012

Attached is a spreadsheet with all the 2013 FE Labels in Verify as of August 1, 2012. Please correct any errors as soon as you can, by August 15, 2012 if possible. As you begin to correct the errors, please let me know if you need an up-to-date query of the data in Verify--e.g. next week or so and I'll be glad to provide it to you.

1. Correcting Errors: As usual, the errors and my comments are shown in the first two columns of the spreadsheet. Green fill in the first few columns means our macro detected an error. Pea green fill means the error occurred in the Verify Release 9 information. Labels with pea green errors will not be sent to DOE for posting on [www.fueleconomy.gov](http://www.fueleconomy.gov) until the (pea green) error has been corrected.

Dark green fill in the first few columns of the spreadsheet means that an error occurred in the new Verify Release 10 information (columns 141-185 of the spreadsheet). Labels with dark green errors will not be sent to be sent to DOE for posting on [www.fueleconomy.gov](http://www.fueleconomy.gov) after August 15, 2012. In addition, they will not be included in the Printed Guide until the errors are corrected. [Some of the new (Release 10) information will be listed on [www.fueleconomy.gov](http://www.fueleconomy.gov) in late August or early September, 2012. We may also include the Greenhouse gas 1-10 rating in the 2013 Printed Guide---so please correct these dark green errors by mid-August, 2012 at the latest (or for Japanese manufacturers, before Japan goes on vacation on August 10, 2012).

Note that (as will be outlined in a forthcoming EPA guidance letter) the last day for manufacturers to make changes for the 2013 Printed Guide is August 29, 2012.

2. Voluntarily lowered Fuel Economy: For labels which you voluntarily lowered the mpg of your vehicles, EPA regulations require that you also increase the CO2 accordingly. Calculating the voluntarily increased combined CO2 value is fairly easy (knowing the unrounded adjusted mpg value, the rounded, voluntarily lowered mpg value, and the unrounded adjusted CO2 value). Our macro will check the voluntarily increased city, highway and combined CO2 value for errors using the formula in the following example:

Given:

unrounded adjusted combined mpg = 21.6949 mpg

unrounded adjusted combined CO2 = 408.4 gpm

Voluntarily lowered Label mpg = 20 mpg

Then: Voluntarily increased CO2 =  $(21.6949 \text{ mpg} \times 408.4 \text{ gpm}) / 20 \text{ mpg} = 443.01 \text{ gpm}$ ; which rounds to 443 gpm CO2

3. Errors in Combined Adjusted Fuel Consumption: As indicated in a previous email to most manufacturers, I'm finding a lot of errors in the new field "Adjusted Combined Model Type Fuel Consumption." Some manufacturers are entering fuel economy values (mpg) values instead of fuel consumption (gallons per 100 miles). Some are incorrectly calculating fuel consumption using the (incorrect) unrounded adjusted combined mpg value instead of the correct rounded adjusted combined mpg value (as listed prominently on the 2013 labels (window stickers)---as explained in more detail in Item 4, below.



If there are errors in the fuel consumption value listed on the actual labels (window stickers) of your vehicles, please correct the labels as soon as practicable. Call or email me if you have questions about the fuel consumption values shown on the actual labels (window stickers) of your vehicles.

4. Mistake in the EPA Regulations for Calculating Fuel Consumption (600.311-12(c): For conventional vehicles (not EVs or PHEVs), there is a mistake in the current regulations at 600.311-12(c) which EPA proposed to correct in the 2017 greenhouse gas proposal (page 76FR 75392, Dec 1, 2011).

The current (incorrect) regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The unrounded value for combined fuel economy from 600.210-12(c)."

The (correct) proposed regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The value for combined fuel economy from 600.210-12(c) rounded to the nearest whole mpg." Please use the voluntarily lowered combined adjusted MPG value, if applicable.

We are making this change for several reasons, e.g. so that customers will be able to accurately calculate the fuel consumption of their vehicle from the information displayed on the label; so that two vehicles with the same combined fuel economy mpg values won't have different fuel consumption values displayed on the label, etc. One benefit to manufacturers and EPA is that this correction will result in fewer questions from consumers about how the fuel consumption values are calculated.

5. Request to update any 2013 FE Labels submitted to Verify before May 11, 2012: EPA and DOE are in the process of updating the information displayed at [www.fueleconomy.gov](http://www.fueleconomy.gov) to show the same type of information which is displayed on the 2013 window stickers, e.g. Fuel Economy (1-10) rating, Greenhouse Gas (1-10) Rating, Smog (1-10) rating, adjusted combined fuel consumption (values, adjusted combined CO2 (grams/mile) values, amount saved (or spent) over 5 years, battery charging time for EVs & PHEVs, etc. We anticipate that the website will be updated within the next couple of months. For this reason, we are requesting that manufacturers update any labels which were entered into EPA's Verify data base prior to May 11, 2012 (Verify Release 9 labels which don't contain this information).

EPA com	VERIFY cc	Model Yr (Mfr Name	Division (	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013Audi	Audi	A3	ADX	59	2.0 4
Diesel; Err	Y	2013Audi	Audi	A3	ADX	73	2.0 4
		2013Audi	Audi	A3	ADX	58	2.0 4
		2013Audi	Audi	A3 quattro	ADX	60	2.0 4
Error in coi	Y	2013Audi	Audi	A4	ADX	35	2.0 4
		2013Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013Audi	Audi	A4 quattro	ADX	40	2.0 4
Error in coi	Y	2013Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013Audi	Audi	A5 Cabriolet	ADX	39	2.0 4
		2013Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013Audi	Audi	A6	ADX	65	2.0 4
		2013Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013Audi	Audi	A6 quattro	ADX	77	3.0 6
Error in coi	Y	2013Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled	Y	2013Audi	Audi	A8	ADX	128	3.0 6
Relabeled	Y	2013Audi	Audi	A8L	ADX	129	3.0 6
		2013Audi	Audi	A8L	ADX	109	6.3 12
		2013Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013Audi	Audi	Q5	ADX	91	2.0 4
Error in coi	Y	2013Audi	Audi	Q7	ADX	61	3.0 6
Diesel; Err	Y	2013Audi	Audi	Q7	ADX	53	3.0 6
		2013Audi	Audi	RS5	ADX	49	4.2 8
		2013Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
Error in coi	Y	2013Audi	Audi	S4	ADX	42	3.0 6
		2013Audi	Audi	S4	ADX	45	3.0 6
Error in coi	Y	2013Audi	Audi	S5	ADX	43	3.0 6
		2013Audi	Audi	S5	ADX	46	3.0 6
Error in coi	Y	2013Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013Audi	Audi	S6	ADX	48	4.0 8
		2013Audi	Audi	S7	ADX	47	4.0 8
		2013Audi	Audi	TT Coupe	ADX	66	2.0 4
Error in coi	Y	2013Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013Audi	Audi	TTRS Coup	ADX	69	2.5 5
Error in coi	Y	2013Bentley	Bentley Motors	Continental	BEX	110	6.0 12
		2013Bentley	Bentley Motors	Continental	BEX	108	4.0 8
Error in coi	Y	2013Bentley	Bentley Motors	Continental	BEX	113	6.0 12
		2013Bentley	Bentley Motors	Continental	BEX	107	4.0 8
Error in coi	Y	2013Bentley	Bentley Motors	Continental	BEX	111	6.0 12
Error in coi	Y	2013Bentley	Bentley Motors	Continental	BEX	112	6.0 12
		2013Bugatti	Bugatti	Veyron	BGT	88	8.0 16
Error in coi	Y	2013Lamborghini	Lamborghini	Aventador	NLX	92	6.5 12
Error in coi	Y	2013Lamborghini	Lamborghini	Aventador	NLX	93	6.5 12
Error in coi	Y	2013Lamborghini	Lamborghini	Gallardo	CNLX	30	5.2 10
Error - sale	Y	2013Lamborghini	Lamborghini	Gallardo	CNLX	32	5.2 10
Error in coi	Y	2013Lamborghini	Lamborghini	Gallardo	SNLX	31	5.2 10

Error - saleY	2013Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel; ErrY	2013Volkswage	Volkswage	BEETLE VWX	94	2.0	4
	2013Volkswage	Volkswage	BEETLE VWX	19	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	BEETLE VWX	84	2.0	4
Error in anY	2013Volkswage	Volkswage	BEETLE VWX	89	2.0	4
Error in coiY	2013Volkswage	Volkswage	BEETLE VWX	17	2.5	5
	2013Volkswage	Volkswage	BEETLE VWX	27	2.5	5
	2013Volkswage	Volkswage	BEETLE COVWX	20	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	BEETLE CVWX	85	2.0	4
	2013Volkswage	Volkswage	BEETLE COVWX	90	2.0	4
	2013Volkswage	Volkswage	BEETLE COVWX	18	2.5	5
	2013Volkswage	Volkswage	CC VWX	1	2.0	4
	2013Volkswage	Volkswage	CC VWX	4	2.0	4
	2013Volkswage	Volkswage	CC VWX	2	3.6	6
	2013Volkswage	Volkswage	CC 4MOTIKVWX	3	3.6	6
	2013Volkswage	Volkswage	Eos VWX	21	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	GOLF VWX	72	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	GOLF VWX	81	2.0	4
	2013Volkswage	Volkswage	GOLF VWX	16	2.5	5
	2013Volkswage	Volkswage	GOLF VWX	26	2.5	5
Error in coiY	2013Volkswage	Volkswage	Golf R VWX	57	2.0	4
	2013Volkswage	Volkswage	GTI VWX	22	2.0	4
	2013Volkswage	Volkswage	GTI VWX	23	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	50	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	Jetta VWX	71	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	86	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	87	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	51	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	Jetta VWX	80	2.0	4
	2013Volkswage	Volkswage	Jetta VWX	15	2.5	5
	2013Volkswage	Volkswage	Jetta VWX	25	2.5	5
Diesel; ErrY	2013Volkswage	Volkswage	JETTA SP VWX	74	2.0	4
Diesel; ErrY	2013Volkswage	Volkswage	JETTA SP VWX	79	2.0	4
	2013Volkswage	Volkswage	JETTA SPO VWX	14	2.5	5
	2013Volkswage	Volkswage	JETTA SPO VWX	24	2.5	5
Diesel;	2013Volkswage	Volkswage	Passat VWX	62	2.0	4
Diesel;	2013Volkswage	Volkswage	Passat VWX	64	2.0	4
	2013Volkswage	Volkswage	Passat VWX	83	2.5	5
	2013Volkswage	Volkswage	Passat VWX	82	2.5	5
	2013Volkswage	Volkswage	Passat VWX	63	3.6	6
Error in RoY	2013Volkswage	Volkswage	TIGUAN VWX	68	2.0	4
Error in coiY	2013Volkswage	Volkswage	TIGUAN VWX	56	2.0	4
Error in coiY	2013Volkswage	Volkswage	TIGUAN 4IVWX	55	2.0	4
Diesel;	2013Volkswage	Volkswage	TOUAREG VWX	54	3.0	6
Error in coiY	2013Volkswage	Volkswage	TOUAREGVWX	78	3.6	6
Hybrid;	2013Volkswage	Volkswage	Touareg H VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Error in Rounded Adjusted combined CO2, we calculate 297; Please revise/Verify as needed.									
Manual(M	21	30	24				25.3	40.3	30.3902
Auto(AM-S	21	28	24				27.2	37.1	30.9119
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8) we calculate 418.3; Please revise/Verify as needed.									
Auto(S8)	18	27	22				22.5575	37.3745	27.4556
Auto(S8)	18	27	22				22.5575	37.3745	27.4556
Auto(S8) 0.314-08 states label values must not change for entire model year, except 2009-2014-08(									
Auto(S8)	18	27	22				22.5575	37.3745	27.4556
Auto(S8) 0.314-08 states label values must not change for entire model year, except 2009-2014-08(									
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8) 411; Please revise/Verify as needed.									
Auto(S8)	19	28	22				19.2813	29.852	22.9361
Auto(AM-S	16	23	18				22.8	39.1	28.0649
Auto(AM-S	16	22	18				19.1	30	22.8332
Auto(AM-S	18	28	21				19.2	28.9	22.6159
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				20	33.4	24.4063
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				20	33.4	24.4063
Auto(AM-S	18	26	21				22.1	34.7	26.4165
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Manual(M	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Verify as needed.									
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(AM-S	8	15	10				10	17.9	12.4782
Auto(AM-S	11	18	13				12.6	25.2	16.2581
Auto(AM-S	10	16	12				11.5	21.2	14.4817
Auto(AM-S) we calculate 562.5; Please revise/Verify as needed.									
Auto(AM-S	13	20	16				16.1	25.4	19.276
Auto(AM-S) not offered for sale in the US; Error in combined unrounded adjusted CO2 value, we calculate 633.6; Please revise									
Manual(M	12	20	15				14	24	17.2308
Auto(AM-S	13	20	16				16	25.4	19.197

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City	Model	Fuel	Unrd Comb Unr	Guzzler?	Air Aspir	IAir Aspira	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbochar	AMS	Automate		6
29.8946	41.5209	34.2046			TC	Turbochar	AMS	Automated		6
20.8146	29.9953	24.1394			TC	Turbochar	M	Manual		6
20.891	28.1035	23.6187			TC	Turbochar	AMS	Automate		6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual		6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual		6
24.5044	32.5529	27.5721			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
18.3949	27.2332	21.5408			SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
e)(17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
e)(17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
13.1387	20.6025	15.6978	G		NA	Naturally	SA	Semi-Auto		8
19.9584	26.6824	22.5112			TC	Turbochar	SA	Semi-Auto		8
19.7289	28.2351	22.823			TC	Turbochar	SA	Semi-Auto		8
15.522	21.5458	17.7559			SC	Superchar	SA	Semi-Auto		8
18.74	27.62	21.9099			TC	Turbochar	SA	Semi-Auto		8
15.7409	23.3075	18.4339			NA	Naturally	AMS	Automate		7
15.8793	22.1836	18.2078			NA	Naturally	AMS	Automate		7
18.117	27.558	21.419			SC	Superchar	AMS	Automated		7
17.0438	26.023	20.1767			SC	Superchar	M	Manual		6
18.117	27.558	21.419			SC	Superchar	AMS	Automated		7
17.0438	26.023	20.1767			SC	Superchar	M	Manual		6
17.6699	25.953	20.6333			SC	Superchar	AMS	Automated		7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automate		7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automate		7
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automate		6
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automated		6
17.751	25.2021	20.4751			TC	Turbochar	M	Manual		6
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto		6
15.0109	24.4645	18.1706			TC	Turbochar	SA	Semi-Auto		8
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto		6
14.0639	23.9773	17.2766	G		TC	Turbochar	SA	Semi-Auto		8
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto		6
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto		6
8.4232	14.7698	10.4424	G		TC	Turbochar	AMS	Automate		7
10.6055	18.4729	13.1199	G		NA	Naturally	AMS	Automated		7
9.7957	16.2453	11.9264	G		NA	Naturally	AMS	Automated		7
13.4655	19.7573	15.718	G		NA	Naturally	AMS	Automated		6
Verify as needed	12.0883	19.9831	14.7021	G	NA	Naturally	AM	Manual		6
13.3954	19.7741	15.6701	G		NA	Naturally	AMS	Automated		6

Verify as needed	14.451	14.1465	G	NA	Naturally	AM	Manual	6
CO2 we calculate 2973; Please revise Verify as needed	22.0202	29.5574	24.8746	TC	Turbochar	AMS	Automated	6
	27.8088	40.6616	32.4203	TC	Turbochar	M	Manual	6
	20.5408	29.7034	23.8517	TC	Turbochar	M	Manual	6
	22.2864	28.5683	24.7338	NA	Naturally	ASA	Semi-Auto	6
	21.7201	30.6767	25.0054	NA	Naturally	FM	Manual	5
	21.1383	28.6751	23.9738	TC	Turbochar	AMS	Automated	6
	27.8088	40.6616	32.4203	TC	Turbochar	M	Manual	6
	20.5408	29.7034	23.8517	TC	Turbochar	M	Manual	6
	21.2302	26.9749	23.4804	NA	Naturally	ASA	Semi-Auto	6
	21.8706	31.0367	25.2227	TC	Turbochar	AMS	Automated	6
	20.8232	31.7255	24.6324	TC	Turbochar	M	Manual	6
	17.4935	26.5716	20.6716	NA	Naturally	ASA	Semi-Auto	6
	16.9415	25.219	19.8774	NA	Naturally	ASA	Semi-Auto	6
	21.7634	30.1121	24.8658	TC	Turbochar	AMS	Automated	6
	29.8946	41.5209	34.2046	TC	Turbochar	AMS	Automated	6
ed CO2 we calculate 2973; Please revise Verify as needed	29.8946	41.5209	34.2046	TC	Turbochar	M	Manual	6
	23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto	6
	22.7343	32.7402	26.3594	NA	Naturally	FM	Manual	5
	19.278	26.8882	22.0917	TC	Turbochar	M	Manual	6
	24.2237	32.5108	27.3624	TC	Turbochar	AMS	Automated	6
	21.2839	30.8324	24.7304	TC	Turbochar	M	Manual	6
	23.7854	31.6043	26.7652	TC	Turbochar	AMS	Automated	6
	29.8946	41.5209	34.2046	TC	Turbochar	AMS	Automated	6
	23.1009	29.1554	25.4822	NA	Naturally	ASA	Semi-Auto	6
	24.3944	33.6309	27.8344	NA	Naturally	FM	Manual	5
	21.8931	32.6043	25.6912	TC	Turbochar	M	Manual	6
ed CO2 we calculate 2973; Please revise Verify as needed	23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto	6
	22.7343	32.7402	26.3594	NA	Naturally	FM	Manual	5
ulate Error in found; Justed combined CO2, we calculate AMS; Please revise/Verify as needed.	22.7343	32.7402	26.3594	NA	Naturally	FM	Manual	5
ed CO2 we calculate 2973; Please revise Verify as needed	23.6446	31.0458	26.486	NA	Naturally	ASA	Semi-Auto	6
	22.7343	32.7402	26.3594	NA	Naturally	FM	Manual	5
	30.4633	40.2057	34.1916	TC	Turbochar	AMS	Automated	6
	30.8024	42.6219	35.1943	TC	Turbochar	M	Manual	6
	22.1078	30.6611	25.2814	NA	Naturally	ASA	Semi-Auto	6
	21.8993	32.1378	25.5642	NA	Naturally	FM	Manual	5
	19.7174	27.8048	22.6868	NA	Naturally	AMS	Automated	6
	20.6233	26.0617	22.7606	TC	Turbochar	SA	Semi-Auto	6
	18.1488	26.2617	21.0791	TC	Turbochar	M	Manual	6
	20.402	25.8545	22.5412	TC	Turbochar	SA	Semi-Auto	6
	19.649	28.9961	22.9829	TC	Turbochar	SA	Semi-Auto	8
	17.0411	22.7325	19.2048	NA	Naturally	ASA	Semi-Auto	8
	19.8843	23.7762	21.4655	SC	Superchar	SA	Semi-Auto	8

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Automated Manual with paddles)	Manual with paddles)	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	2-Wheel DDVW XV02.0U5N			5	DU	Diesel, ultr	
N	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	F	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	F	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	F	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
ounded unadjusted CO2 value, which calculate 4	ounded unadjusted CO2 value, which calculate 4		All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
ounded unadjusted CO2 value, which calculate 4	ounded unadjusted CO2 value, which calculate 4		All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDVW XV06.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XT03.03UG			5	DU	Diesel, ultr	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV02.0		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDBGTV08.0		10		GPR	Gasoline (F	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDNL XV06.0		10		GPR	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDNL XV06.0		10		GPR	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV05.0		10		GP	Gasoline (I	
N	N	A	All Wheel IDAD XV05.0		10		GP	Gasoline (I	
Automated Manual with paddles)	Manual with paddles)	F	All Wheel IDAD XV05.0		10		GP	Gasoline (I	



N	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (I
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.	10		GP	Gasoline (I
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (I
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXV03.	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	A	All Wheel IDAD XV02.	10		GP	Gasoline (I
Automated Manual with paddles)			2-Wheel DDAD XV02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDAD XV02.0	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXJ02.0	10		GP	Gasoline (F
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U5N		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
N	N	F	2-Wheel DDVWXV02.0U4S		5	DU	Diesel, ultr
Y	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
N	N	F	2-Wheel DDVWXV02.	10		G	Gasoline (F
Automated Manual with paddles)			2-Wheel DDVWXV03.	10		GP	Gasoline (F
Y	N	F	2-Wheel DDVWXJ02.	10		GP	Gasoline (I
N	N	F	2-Wheel DDVWXJ02.	10		GP	Gasoline (I
Y	N	A	All Wheel IDVWXJ02.	10		GP	Gasoline (I
Y	N	A	All Wheel IDAD XT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel IDVWXT03	10		GP	Gasoline (I
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F

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MPG (Unleaded, Recommended)	Not exempt			
MPG (15 ppm maximum)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt		85	15
MPG (15 ppm maximum)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt	81	7	
MPG (15 ppm maximum)	Not exempt	81	7	
MPG (Unleaded, Recommended)	Not exempt	81	7	
MPG (Unleaded, Recommended)	Not exempt	81	7	
MPG (Unleaded, Recommended)	Not exempt	94	13	
MPG (Unleaded, Recommended)	Not exempt	94	13	
MPG (Unleaded, Recommended)	Not exempt	94	13	
MPG (Unleaded, Recommended)	Not exempt	94	13	
MPG (Unleaded, Recommended)	Not exempt	77	11	
MPG (15 ppm maximum)	Not exempt		94	15
MPG (15 ppm maximum)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt		94	15
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (15 ppm maximum)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (15 ppm maximum)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (Unleaded, Recommended)	Not exempt	94	16	
MPG (15 ppm maximum)	Not exempt	92	33	
MPG (15 ppm maximum)	Not exempt	92	33	
MPG (Unleaded, Recommended)	Not exempt	92	33	
MPG (Unleaded, Recommended)	Not exempt	92	33	
MPG (15 ppm maximum)	Not exempt	102	16	
MPG (15 ppm maximum)	Not exempt	102	16	
MPG (Unleaded, Recommended)	Not exempt	102	16	
MPG (Unleaded, Recommended)	Not exempt	102	16	
MPG (Unleaded, Recommended)	Truck			
MPG (Unleaded, Recommended)	Truck			
MPG (Unleaded, Recommended)	Truck			
MPG (15 ppm maximum)	Truck			
MPG (Unleaded, Recommended)	Truck			
MPG (Unleaded, Recommended)	Truck			

Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel)	Low'd City	Low'd Hwy	Low'd Cor	City2 Unadj
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C					
1700	1700	corrected CO2 values					
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values					
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v					
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unround					
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and					
2200	2200						
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected					
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and					
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and					
2200	2200						
2050	2050	corrected forward speeds to 8, for this CVT trans					
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched					
2600	2600						
2700	2700	corrected unadj unrnd city CO2 value					
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value					
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrd city CO2 value corrected					
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con					
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c					
2500	2500	corrected unadj unrounded highway and combined values					
3150	3150	CO2 corrections					
2600	2600	CO2 corrections					
3150	3150	CO2 corrections					
3150	3150	corrected city CO2 value, typo					
2700	2700	corrected city unadj unrdn CO2					
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una					
2700	2700	corrected city unadj unrounded CO2					
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una					
2700	2700	corrected unadj and adj CO2 values					
2850	2850	CO2 corrections					
2850	2850	CO2 corrections					
2200	2200	CO2 corrections					
2200	2200	CO2 corrections					
2850	2850						
4050	4050	8 13 10 9.5					
3150	3150						
4050	4050	8 14 10 10.3					
3350	3350						
4050	4050	8 13 10 9.5					
4050	4050	8 14 10 10.3					
5700	5700	corrected lock out to "yes" and AMS.					
4400	4400	lock up to YES.					
4750	4750	adjusted release date, lock up to YES.					
3550	3550	corrected fuel consumption per ASTM rounding procedure					
3800	3800						
3550	3550	corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure					

4050	4050
1800	1800
2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400 corrected CO2 values
2150	2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g
2150	2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u
2400	2400 annual fuel cost corrected, post release 10 amd AMS used, corrected highway value from 28 t
1800	1800 corrected to use manufacturer's confirmatory tests
2400	2400 CO2 corrections, fuel spending corrected to \$400
2300	2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre
2700	2700 update after Verify release 10
2850	2850 UPDATE after Verify release 10
2300	2300 CO2 corrections
1700	1700 corrected CO2 values
1700	1700 corrected CO2 values
2050	2050 early label, update after Verify release 10, CO2 corrections
2050	2050 update after Verify release 10 issued, CO2 comb correction
2600	2600 CO2 corrections
2100	2100 CO2 corrections
2300	2300 early label, upate after Verify release 10
2100	2100 corrected unadjusted unrounded CO2 highway and conbined values and combined adjusted w
1700	1700 corrected CO2 values
2150	2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6
1900	1900 FE and GHG ratings corrected to 7
2200	2200 CO2 corrections
1700	1700 corrected CO2 values
2050	2050 early label, update after Verify release 10, CO2 corrections
2050	2050 update after Verify release 10 issued, CO2 corrections
1750	1750 CO2 corrections
1700	1700 corrected CO2 values
2050	2050 early label, update after Verify release 10, CO2 corrections
2050	2050 update after Verify release 10 issued, CO2 corrections
1700	1700
1650	1650
2150	2150 CO2 corrections
2050	2050 CORRCTED 5 YEAR FUEL SAVINGS, CO2 corrections
2500	2500 CO2 correction
2500	2500 corrected CO2 values
2700	2700 CO2 corrections
2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections
2500	2500 CO2 corrections
3000	3000
2700	2700 CO2 corrections

02

gallons per 100 value...these values were switched

gallons per 100 value...these values were switched

ity and highway CO2 values

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E-MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E-MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E-MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E-MPG	miles per g

roup

nrounded highway and combined CO2 values

o 29 MPG

ed MPG value

nd corresponding 5-cycle values

cted calculated values

hole CO2 value

Relative Fuel	CO2	CO2	Comb CO2	Fuel2 EPA	Description	Intake Val	Exhaust V	Carline CI	Carline CI
					SIDI;	2	27		Small Stati
						2	27		Small Stati
					SIDI;	2	27		Small Stati
					SIDI;	2	27		Small Stati
					SIDI;	2	24		Compact C
					SIDI;	2	24		Compact C
					SIDI;	2	24		Compact C
					SIDI;	2	23		Subcompa
					SIDI;	2	23		Subcompa
					SIDI;	2	23		Subcompa
					SIDI;	2	23		Subcompa
					SIDI;	2	25		Midsize Ca
					SIDI;	2	25		Midsize Ca
					SIDI;	2	25		Midsize Ca
					SIDI;	2	25		Midsize Ca
					SIDI; Unde	2	25		Midsize Ca
					SIDI; Unde	2	26		Large Cars
					SIDI;	2	26		Large Cars
					SIDI;	2	27		Small Stati
					SIDI;	2	231		Small SUV 4WD
					SIDI;	2	233		Standard SUV 4W
						2	233		Standard SUV 4W
					SIDI;	2	23		Subcompa
					SIDI;	2	23		Subcompa
					SIDI;	2	24		Compact C
					SIDI;	2	24		Compact C
					SIDI;	2	23		Subcompa
					SIDI;	2	23		Subcompa
					SIDI;	2	23		Subcompa
					SIDI;	2	25		Midsize Ca
					SIDI;	2	25		Midsize Ca
					SIDI;	2	23		Subcompa
					SIDI;	2	21		Two Seate
4650	794	469	648	4650	SIDI;	2	23		Subcompa
					FFV;	2	25		Midsize Ca
					SIDI;	2	24		Compact C
4650	794	469	648	4650	FFV;	2	24		Compact C
					SIDI;	2	23		Subcompa
4650	794	469	648	4650	FFV;	2	23		Subcompa
4650	794	469	648	4650	FFV;	2	23		Subcompa
						2	21		Two Seate
						2	21		Two Seate
						2	21		Two Seate
					SIDI;	2	21		Two Seate
					SIDI;	2	21		Two Seate
					SIDI;	2	21		Two Seate



SIDI;	2	21	Two Seate
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	23	Subcompa
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	1	15	Midsize Ca
	1	15	Midsize Ca
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
SIDI;	2	25	Midsize Ca
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
car	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
car	Derived 5-cycle label	6/22/2012	11296	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11488	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11489	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	11506	N	N	
car	economy/vehicle specific 5-cycle	6/20/2012	507	XX	XX	MPG highway, and XX MPG combined;
car	economy/vehicle specific 5-cycle	6/20/2012	508	XX	XX	MPG highway, and XX MPG combined;
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
car	Derived 5-cycle label	4/26/2012	11490	N	N	
	Vehicle Specific 5-cycle	7/11/2012	11319	N	N	
D	Derived 5-cycle label	6/11/2012	11509	N	N	
D	Vehicle Specific 5-cycle	7/18/2012	11511	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11510	N	N	
car	Vehicle Specific 5-cycle	6/13/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11325	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11326	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11314	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11514	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11516	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	8/30/2012	10181	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle	8/30/2012	10185	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle	8/30/2012	10183	N	N	
car	Vehicle Specific 5-cycle	8/30/2012	10184	N	N	
car	Vehicle Specific 5-cycle	7/12/2012	11087	N	N	
car	Vehicle Specific 5-cycle	8/7/2012	11091	N	N	
car	Vehicle Specific 5-cycle	1/1/2013	11089	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	10647	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	10237	N	N	
car	Vehicle Specific 5-cycle	6/20/2012	10648	N	N	

car	Vehicle Specific 5-cycle	6/20/2012	10238	N	N
car	Derived 5-cycle label	7/19/2012	10750	N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187	N	N
car	Derived 5-cycle label	6/25/2012	10707	N	N
car	Vehicle Specific 5-cycle	7/12/2012	11525	N	N
car	Vehicle Specific 5-cycle	7/30/2012	10751	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373	N	N
car	Derived 5-cycle label	7/30/2012	10277	N	N
car	Derived 5-cycle label	6/25/2012	10708	N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287	N	N
car	Vehicle Specific 5-cycle	7/16/2012	10186	N	N
car	Vehicle Specific 5-cycle	7/25/2012	11044	N	N
car	Vehicle Specific 5-cycle	7/16/2012	10532	N	N
car	Vehicle Specific 5-cycle	7/16/2012	10534	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527	N	N
car	Derived 5-cycle label	6/22/2012	11295	N	N
car	Derived 5-cycle label	6/25/2012	11299	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11530	N	N
car	Vehicle Specific 5-cycle	6/16/2012	11531	N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531	N	N
car	Vehicle Specific 5-cycle	6/18/2012	11372	N	N
car	Derived 5-cycle label	6/22/2012	11294	N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219	N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300	N	N
car	Vehicle Specific 5-cycle	6/16/2012	11532	N	N
car	Derived 5-cycle label	6/25/2012	11298	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535	N	N
cars	Derived 5-cycle label	6/25/2012	11301	N	N
cars	Derived 5-cycle label	6/25/2012	11297	N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11534	N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11536	N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158	N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163	N	N
car	Vehicle Specific 5-cycle	6/23/2012	11539	N	N
car	Vehicle Specific 5-cycle	6/23/2012	11547	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554	N	N
	Derived 5-cycle label	6/18/2012	11556	N	N
	Vehicle Specific 5-cycle	6/11/2012	11558	N	N
	Derived 5-cycle label	6/11/2012	11557	N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563	N	N
D	Derived 5-cycle label	6/25/2012	10319	N	N
D	Derived 5-cycle label	6/25/2012	11559	N	N

Suppressor	Police/Em	Comment	Cyl Deact	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Var Valve	Energy St
N	N	Test Group	N		Y	CONTINU	CN			
N	N		N		N		N			
N	N	Test Group	N		Y	CONTINU	CN			
N	N	ENGINE CC	N		Y	CONTINU	CN			
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	Intake and	N			
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N	Engine coc	N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(N			
N	N		N		N		N			
N	N		N		Y	Continuou	N			
N	N		N		Y	Continuou	N			
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N		N		Y	CONTINU	CY		AUDI VALV	
N	N		N		Y	CONTINU	(Y		AUDI VAL	
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y		Multi-lobe	
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y		Multi-lobe	
N	N	ENGINE CC	N		Y	CONTINU	CN			
N	N	ENGINE CN			Y	CONTINU	(N			
N	N		N		Y	CONTINU	CN			
N	N	Continenta	N		Y	INLET AN	IN			
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y		Multi-lobe	
N	N	Continenta	N		Y	INLET AN	IN			
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y		Multi-lobe	
N	N	Continenta	N		Y	INLET AN	IN			
N	N	Continenta	N		Y	INLET AN	IN			
N	N	CHARGE A	N		Y	INLET AND	N			
N	N		Y	ELECTRO	Y	HYDRAUL	N			
N	N		Y	ELECTRO	Y	HYDRAUL	N			
N	N	ENGINE CN			Y	INLET AN	IN			
N	N	ENGINE CN			Y	INLET AN	IN			
N	N	ENGINE CN			Y	INLET AN	IN			

N	N	ENGINE CN	Y	INLET ANIN	
N	N	N	N	N	
N	N	N	Y	position ofN	
N	N	N	N	N	
N	N	N	Y	position of N	
N	N	N	Y	INLET COIN	
N	N	N	Y	INLET CONN	
N	N	N	Y	position ofN	
N	N	N	N	N	
N	N	N	Y	position ofN	
N	N	N	Y	INLET CONN	
N	N	N	Y	position ofN	
N	N	N	Y	position ofN	
N	N	N	Y	position ofN	
N	N	N	Y	position ofN	
N	N	N	Y	CONTINU CN	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	INLET CONN	
N	N	N	Y	INLET CONN	
N	N	ENGINE CN	Y	CONTINU CN	
N	N	ENGINE CCN	Y	CONTINU CN	
N	N	ENGINE CCN	Y	CONTINU CN	
N	N	N	Y	position ofN	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	position ofN	
N	N	N	N	N	
N	N	N	Y	INLET CONN	
N	N	N	Y	INLET CONN	
N	N	N	N	N	
N	N	N	N	N	
N	N	N	Y	INLET CONN	
N	N	N	Y	INLET CONN	
N	N	SCR EquiprN	N	N	
N	N	SCR EquiprN	N	N	
N	N	N	Y	INLET CONN	
N	N	N	Y	INLET CONN	
N	N	N	Y	Electronic N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	INTAKE / EN	
N	N	V6 CYLIND N	Y	MECANICAN	Battery(s)

Device Descri	Battery	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit
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toll and hydraulically adjusted.

1. The control valve is located in the rear of the vehicle. It is a 2-way valve that controls the flow of hydraulic fluid to the rear cylinder. The valve is actuated by a solenoid that is controlled by the rear wheel speed sensor. The valve is located in the rear of the vehicle, near the rear wheel.

STMENT

E / MECHANICAL-HYDRAULIC

1. The control valve is located in the rear of the vehicle. It is a 2-way valve that controls the flow of hydraulic fluid to the rear cylinder. The valve is actuated by a solenoid that is controlled by the rear wheel speed sensor. The valve is located in the rear of the vehicle, near the rear wheel.

E / MECHANICAL-HYDRAULIC

1. The control valve is located in the rear of the vehicle. It is a 2-way valve that controls the flow of hydraulic fluid to the rear cylinder. The valve is actuated by a solenoid that is controlled by the rear wheel speed sensor. The valve is located in the rear of the vehicle, near the rear wheel.

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

6. The control valve is located in the rear of the vehicle. It is a 2-way valve that controls the flow of hydraulic fluid to the rear cylinder. The valve is actuated by a solenoid that is controlled by the rear wheel speed sensor. The valve is located in the rear of the vehicle, near the rear wheel.

CONTROLLED CONTINUOUSLY VVT

CONTROLLED CONTINUOUSLY VVT

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
AL HYDRAULIC

YDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC

controlled and hydraulically adjusted  
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YDRAULIC

YDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

YDRAULIC

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YDRAULIC

YDRAULIC

YDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

RAULICALLY AND CONTROLLED ELECTRONICALLY

AMS	1 NiMH	288	6	21.5 On-Board
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es(2)ine d gear at this loer, FGTg e d t r e t h y l i n e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km  
 es(2)ine d gear at this loer, FGTg e d t r e t h y l i n e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine d gear at this loer, FGTg e d t r e t h y l i n e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine d gear at this loer, FGTg e d t r e t h y l i n e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km



Other BRAKE PEBoth N

1Other

2017-FFP 004413

		GDI	Spark Ignit	N	10W60 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		MFI	Multipoint/	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		MFI	Multipoint	N	10W40 / V
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W-40 VW
		GDI	Spark Ignit	N	5W-40 VW
		GDI	Spark Ignit	N	5W40 / VW
		CRDI	Common FN	N	5W40
		CRDI	Common FN	N	5W40
		MFI	Multipoint	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		GDI	Spark IgnitN	N	5W40
		GDI	Spark IgnitN	N	5W40
		GDI	Spark IgnitN	N	5W40
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		MFI	Multipoint	N	5W40 VW
		MFI	Multipoint	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common FN	N	5W40
		MFI	Multipoint	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		CRDI	Common FN	N	5W40
		CRDI	Common FN	N	5W40
		MFI	Multipoint	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		CRDI	Common F	N	5W40 VW
		CRDI	Common F	N	5W40 VW
		MFI	Multipoint	N	10W40 / V
		MFI	Multipoint	N	10W40 / V
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		GDI	Spark Ignit	N	5W40 VW
		CRDI	Common F	N	5W30 VW
		GDI	Spark Ignit	N	5W40 VW
3 PHASE CI	34	GDI	Spark IgnitN	N	5W40 VW



N50500	No	Manual(MfManual(MfGallardo S
N	No	Auto(AM-SAAuto(AM-S
N	No	Auto(AM-SAAuto(AM-S
N	No	Manual(MfManual(Mf
N	No	Manual(MfManual(Mf
N	No	Auto(S6) Auto(S6)
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N	No	Auto(AM-SAAuto(AM-S
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N	No	Auto(S6) Auto(S6)
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N	No	Auto(AM-SAAuto(AM-S
N	No	Manual(MfManual(MfJetta Sport
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N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M Manual(Mf
N	No	Manual(M Manual(M
N	No	Manual(MfManual(MfJetta Sport
N	No	Auto(S6) Auto(S6)
N	No	Manual(M Manual(Mf
N	No	Auto(AM-SAAuto(AM-S
N	No	Manual(MfManual(MfJetta Sport
N	No	Auto(S6) Auto(S6)
N	No	Manual(M Manual(Mf
N	No	Auto(AM-SAAuto(AM-S
N	No	Auto(S6) Auto(S6) Tiguan for
N	No	Manual(MfManual(Mf
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Touareg H

Model Year	MPG City	MPG Hwy	EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
	30.8			6	6 DAD XV02.0	7		
	46.2			9	8 DVW XV02	5		
	30.4			6	6 DAD XV02.0	7		
	30.9			6	6 DAD XV02.0	5		
	35.2			7	7 DAD XV02.	5		
	30.8			6	6 DAD XV02.0	5		
	33.2			7	7 DAD XV02.0	5		
	35.2			7	7 DAD XV02.	5		
	30.8			6	6 DAD XV02.0	5		
	30.8			6	6 DAD XV02.0	5		
	33.2			7	7 DAD XV02.0	5		
	36.9			7	7 DAD XV02.0	5		
	30.8			6	6 DAD XV02.0	5		
	28.1			5	5 DAD XJ03.0	5		
	27.5			5	5 DAD XJ03.0	5		
	27.5			5	5 DAD XJ03.0	5		
	27.5			5	5 DAD XJ03.0	5		
	19.3			3	3 DVW XV06.	5		
	29.5			6	6 DAD XV02.0	5		
	28.8			6	6 DAD XT02.0	5		
	22.9			4	4 DAD XT03.	5		
	28.1			5	4 DAD XT03.	5		
	23			4	4 DAD XV04.0	5		
	22.6			4	4 DAD XV04.0	5		
	26.9			5	5 DAD XJ03.0	5		
	23.5			5	5 DAD XJ03.0	5		
	26.9			5	5 DAD XJ03.0	5		
	23.5			5	5 DAD XJ03.0	5		
	26.4			5	5 DAD XJ03.0	5		
	25.5			5	5 DAD XV04.0	5		
	25.5			5	5 DAD XV04.0	5		
	33.3			7	7 DAD XV02.0	5		
	33.3			7	7 DAD XV02.	5		
	25.6			5	5 DAD XV02.0	5		
	17.2			2	2 DBEXV06.	5		
	23.6			4	4 DAD XV04.0	5		
	17.4			2	2 DBEXV06.	5		
	21.8			4	4 DAD XV04.0	5		
	17.2			2	2 DBEXV06.	5		
	17.4			2	2 DBEXV06.	5		
	12.6			1	1 DBGTV08.0	5		
	16.4			2	2 DNL XV06.	5		
	14.5			1	1 DNL XV06.	5		
	19.4			3	3 DAD XV05.	5		
	17.4			3	3 DAD XV05.	5		
	19.3			3	3 DAD XV05.	5		

16.1		2	2DAD XV05.	5
43.7		8	7DVWXV02	5
31.8		6	6DVWXV02.	7
43.4		8	7DVWXV02	5
30.7		6	6DVWXV02	7
31.6		6	6DVWXV02	7
31.9		6	6DVWXV02.	7
31.5		6	6DVWXV02.	7
43.4		8	7DVWXV02	5
30.7		6	6DVWXV02.	7
30.3		6	6DVWXV02.	7
32.3		6	6DVWXV02.	7
31.8		6	6DVWXV02.	7
25.8		5	5DVWXV03.	5
24.8		5	5DVWXV03.	5
32.4		6	6DVWXV02.	5
46.2		9	8DVWXV02	5
46		9	8DVWXV02	5
33.1		7	7DVWXV02.	7
32.2		7	7DVWXV02.	7
28.5		5	5DAD XV02.	5
34.8		7	7DAD XV02.(	7
31.2		6	6DAD XV02.(	7
35		7	7DVWXV02.	7
46.2		9	8DVWXV02	5
32.9		6	6DVWXV02.	5
34.7		7	7DVWXV02.	5
32.6		7	7DVWXV02.	7
46		9	8DVWXV02	5
33.1		7	7DVWXV02.	7
32.2		7	7DVWXV02.	7
44.2		8	7DVWXV02	5
46		9	8DVWXV02	5
33.1		7	7DVWXV02.	7
32.2		7	7DVWXV02.	7
44.6		9	8DVWXV02.	5
46.4		9	8DVWXV02.	5
31.9		6	6DVWXV02.	7
31.7		7	7DVWXV02.	7
28.5		6	6DVWXV03.	5
29.9		6	6DVWXJ02.	5
26.4		5	5DVWXJ02.	5
29.6		6	6DVWXJ02.	5
23.3		6	5DADXT03.(	5
25		4	4DVWXT03	5
28.2		5	5DVWXT03.	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm



DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DADXV02.0 5

DADXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

2017-FFP 004421

	8650	768	452	625	681
2600		350	260	310	272
100		401	291	351	334.3
2600		361	248	310	281.3
2400		430	298	371	350.8
850		396	310	358	323.7
850		408	289	354	335.2
	400	421	310	371	332
2600		361	248	310	281.3
	400	430	298	371	350.8
100		418	329	378	335.4
100		403	283	349	327.2
100		425	279	360	346.3
	1900	507	334	429	419
	2650	523	351	446	434
100		405	257	338	321
3100		336	243	294	259.8
3100		338	241	294	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
	1400	460	330	402	372
1100		379	271	331	295.1
100		416	287	358	340.4
1100		372	280	331	300.9
3100		336	243	294	259.8
850		381	299	344	315
2100		361	262	316	307
600		403	272	344	333.9
3100		338	241	294	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
2850		348	256	306	270
3100		338	241	294	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
3100		331	240	290	268
3350		330	239	289	266
850		401	289	351	328.2
1350		391	275	339	339.6
	900	449	319	390	372
	900	430	342	390	339.6
	1900	484	336	417	407
	900	435	344	394	343.7
	900	517	351	442	422
	3400	520	391	462	416
	1900	447	372	413	354

Model	City CO2 (g/km)	City EPA (g/km)	City Calculated (g/km)	City PHEV (g/km)
232	287.6	431.8	318.9	381
171.2	219.9	335.7	242.8	293.9
220	291.5	442.5	295.6	376.4
239	286.3	442	316	385.3
199.8	251.6	373.3	303.6	341.9
218.7	288.6	436.9	296.8	373.9
202.1	267.2	397.1	276.4	342.8
199.8	251.6	373.3	303.6	341.9
218.7	288.6	436.9	296.8	373.9
218.7	288.6	436.9	296.8	373.9
202.1	267.2	397.1	276.4	342.8
189	240.2	360	272	320.4
218.7	288.6	436.9	296.8	373.9
233	315.8	481.7	326	411.6
238.7	323.9	498	320.9	418.4
238.7	323.9	498	320.9	418.4
238.7	323.9	498	320.9	418.4
346	463.2	675	430	564.8
238	300.7	444	333	394
230	300.4	449.6	314.3	388.7
296	386.8	573	412	500.1
260	362.3	541	369	463.6
296	389.5	562.3	379.3	480
307	392.8	558	398	486
248	329.4	488	321	412.9
266	363.4	440.6	355	402.1
248	329.4	488	321	412.9
266	363.4	440.6	355	402.1
256	335.8	500.4	340.8	428.5
251.6	348.2	530.4	329.7	440.1
251.6	348.2	530.4	329.7	440.1
209.9	266.1	394.5	284.4	345
209.9	266.1	394.5	284.4	345
259	347	498.9	350.4	432.1
361	519.4	787	474	646
265	375.6	590	364	488.3
359	513	768	469	634
288	410.1	638	370	517.4
361	519.4	787	474	646
359	513	768	469	634
495	709.5	1050.2	598.8	847.1
353	547.2	836	481	676.3
418	612.2	902	547	742
349	460.7	657	447	563
370	515.8	734	511	633
348	462.4	660	446	564

391	550.5	768	452	625
184	232.4	350	260	310
211.2	278.9	401	290.6	351.3
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.8
227.6	280.5	396.3	310.3	358.2
207.2	277.6	407.6	288.8	354.1
220.9	282	421	310	371
175.3	233.6	361	248.3	310.3
214.6	289.5	430.3	298	370.8
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
202.5	281.6	425.2	279.3	359.5
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	404.7	256.6	338.1
171.2	219.9	335.7	242.8	293.9
170	220.5	337.9	241.2	294.4
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
240	312.6	459.5	330.5	401.5
203.2	253.7	379.2	271.3	330.6
215.5	284.2	415.9	287	357.9
196.7	254	372	280.4	330.8
171.2	219.9	335.7	242.8	293.9
214	269.6	381.3	298.8	344.2
192	255.2	360.5	262	316.2
197.2	272.4	403.3	271.8	344.1
170	220.5	337.9	241.2	294.4
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
181	230	347.7	256	306.4
170	220.5	337.9	241.2	294.4
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.7
206.8	279.8	391.3	275	339
238	311.7	449	319	390.5
244.4	296.8	429.9	341.3	390
248	335.5	484	336	417.4
246.1	299.8	434.7	343.6	394
248	343.7	517	351	442.3
281	355.3	520.1	390.6	461.8
267	314.8	446.9	371.8	413.1

City	EPA_Comb Vol Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT	EPA_INCR
N	4.2	4.2				
N	2.9	2.9				
N	4.2	4.2				
N	4.2	4.2				
N	3.8	3.8				
N	4.2	4.2				
N	3.8	3.8				
N	3.8	3.8				
N	4.2	4.2				
N	4.2	4.2				
N	3.8	3.8				
N	3.6	3.6				
N	4.2	4.2				
N	4.5	4.5				
N	4.8	4.8				
N	4.8	4.8				
N	4.8	4.8				
N	6.2	6.2				
N	4.3	4.3				
N	4.3	4.3				
N	5.6	5.6				
N	4.5	4.5				
N	5.6	5.6				
N	5.6	5.6				
N	4.8	4.8				
N	5	5				
N	4.8	4.8				
N	5	5				
N	4.8	4.8				
N	5	5				
N	5	5				
N	3.8	3.8				
N	3.8	3.8				
N	5	5				
N	7.1	7.1				
N	5.6	5.6				
N	7.1	7.1				
N	5.9	5.9				
N	7.1	7.1				
N	7.1	7.1				
N	10	10				
N	7.7	7.7				
N	8.3	8.3				
N	6.2	6.2				
N	6.7	6.7				
N	6.2	6.2				

N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8

\\nas01n015-n016-files01-02\ffp\proj\01-02\01-02-RND\_EPA\_RND\_EPA\_UNR\EPA\_UNR\EPA\_UNR





UNRIEPA_UNRIEPA_ADJ_EPA_PHEVLabel	Submitter
2007	2007

[illegible]

[illegible]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Fri 8/10/2012 3:02:02 PM  
**Subject:** EPA Confirmatory Test CO2 Bag Data

Hello Jim,

Can you confirm if CO2 bag data will now be included in the Verify generated XML test reports for confirmatory tests conducted at EPA. It's currently required by manufacturers to input this data in Verify for Manufacturer performed tests but last EPA test reports we pulled from May did not include the CO2 bag data. We need the data to calculating 5-cycle fuel economy labels when confirmatory tests apply.

Thanks,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Fri 8/10/2012 9:25:10 PM  
**Subject:** Re: EPA Confirmatory Test CO2 Bag Data

Yes that is true. I also checked some recent tests and saw the bag data there.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>  
Date: 08/10/2012 11:02 AM  
Subject: EPA Confirmatory Test CO2 Bag Data

Hello Jim,

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**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Fri 8/10/2012 10:14:56 PM  
**Subject:** Bentley cert

Bill, the filing fee appeared today for the Bentley but I haven't looked at it much yet. Any rush or can it wait to later next week?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 8/13/2012 11:30:51 AM  
**Subject:** RE: Bentley cert  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Jim,

Earlier in the week would be preferred. Production is scheduled for Aug. 20th and we still have to get ARB to sign off after we get a Certificate. Let me know if that's a problem.

Thanks,

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Friday, August 10, 2012 6:15 PM  
To: Rodgers, William (EEO)  
Subject: Bentley cert

Bill, the filing fee appeared today for the Bentley but I haven't looked at it much yet. Any rush or can it wait to later next week?

Jim Snyder  
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 hynnila@detroitdiesel.com;kargul.john@epa.gov;kristen.johnson@ee.doe.gov;david.patterson@n  
 a.mitsubishi-motors.com;Maureen.Hand@nrel.gov;markus.becker@bmu.bund.de;kate@theicct.org;Ssanchez  
 @cleanairinstitute.org;gmenckhoff@gmail.com;MFernandez@mma.gob.cl;molivera@clintonfoun  
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 unker.Byron@epa.gov;doug.richman@kaiseral.com;ealonso@mit.edu;blueca@ornl.gov;blubaugh  
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 alonso@mit.edu;blueca@ornl.gov;blubaugh.jim@epa.gov;albird@fedex.com;smehndiratta@worldbank.org;samuel.mclaughlin@volvo.com;steve.j.charlton@cummins.com;donald.keski-hynnila@detroitdiesel.com;kargul.john@epa.gov;kristen.johnson@ee.doe.gov;david.patterson@na.mitsubishi-motors.com;Maureen.Hand@nrel.gov;markus.becker@bmu.bund.de;kate@theicct.org;Ssanchez@cleanairinstitute.org;gmenckhoff@gmail.com;MFernandez@mma.gob.cl;molivera@clintonfoundation.org[];  
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menckhoff@gmail.com;MFernandez@mma.gob.cl;molivera@clintonfoundation.org[];  
Fernandez@mma.gob.cl;molivera@clintonfoundation.org[]; olivera@clintonfoundation.org[]

**Cc:** []

**From:** CN=Gay MacGregor/OU=AA/O=USEPA/C=US

**Sent:** Tue 8/14/2012 3:47:46 PM

**Subject:** URGENT: Baltimore Hilton Environmentally Friendly Vehicle Conference Room Block  
Expiring

[http://www.hilton.com/en/hi/groups/personalized/B/BWICCHH-EPA-  
20120906/index.jhtml?WT.mc\\_id=POG](http://www.hilton.com/en/hi/groups/personalized/B/BWICCHH-EPA-20120906/index.jhtml?WT.mc_id=POG)

Hello All,

Thank you for participating in the upcoming Environmentally Friendly Vehicle Conference. We are  
looking forward to a great event.

Our special conference room rates at the Baltimore Hilton will expire shortly. If you need a hotel for the  
conference please reserve your room by the end of this week.

The direct link to the hotel registration is:[http://www.hilton.com/en/hi/groups/personalized/B/BWICCHH-  
EPA-20120906/index.jhtml?WT.mc\\_id=POG](http://www.hilton.com/en/hi/groups/personalized/B/BWICCHH-EPA-20120906/index.jhtml?WT.mc_id=POG)

Thank you,

Gay MacGregor  
Senior Policy Advisor  
Office of Transportation and Air Quality  
USEPA

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US  
**Sent:** Wed 8/15/2012 6:15:33 PM  
**Subject:** Re: VW Group - Simple question about Test Data (Fuel Economy)

MFR\_FE is a value that a manufacturer (you) enters when entering the test data.

RoundedAdjustedFuelEconomyValue is the official fuel economy value calculated by Verify.

When a test is done by our lab, our lab's computer enters the MFR\_FE value into the test submission. However, our lab does not differentiate who or what the test is being used for. For example, they don't know if the test is being submitted for a light duty or heavy duty vehicle, or what the standard is that they are comparing each emission constituent against. It just isn't programmed into their system.

Rounding for each emission constituent is based on 1 more decimal place than the regulation specifies for that emission constituent. Because our lab doesn't know what standard it is being compared against, they don't know what to round each emission to. Their fuel economy calculations in many cases will be based on unrounded values.

The RAFE value (Rounded Adjusted) is calculated by Verify and has each emission constituent rounded to the correct precision before calculation. So when calculating your label or CAFE values always use the RAFE values for all tests including your own tests.

Robert Peavyhouse  
Compliance Division  
U.S. EPA - Office of Transportation and Air Quality  
phone: (734) 214-4814  
fax: (734) 214-4053  
email: peavyhouse.robert@epa.gov  
website: <http://www.epa.gov/nvfel/>

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA, Robert Peavyhouse/AA/USEPA/US@EPA  
**Date:** 07/31/2012 01:54 PM  
**Subject:** VW Group - Simple question about Test Data (Fuel Economy)

Hello Jim and Robert,

Could you help clarify a question I have about the data elements related to FE in the test data xml reports from VERIFY (?)

Could you explain the difference between "MFR FE" and "RoundedAdjustedFuelEconomyValue" tags found within the "EPAGeneratedEmissionTestDetails" section of the xml?

I have a test data set for a HWY test where these values differ, and I need to know which is appropriate to use (for CAFÉ type combined FE calculation).

Thanks!  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Robert Peavyhouse/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA;"Rodgers, William (EEO)"  
[William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com];  
Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 8/15/2012 6:49:31 PM  
**Subject:** RE: VW Group - Simple question about Test Data (Fuel Economy)  
[peavyhouse.robert@epa.gov](mailto:peavyhouse.robert@epa.gov)  
<http://www.epa.gov/nvfe/>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)

Bob,

Thank you for the follow up, this is helpful for our internal checks.

Regards

Mike

From: Robert Peavyhouse [mailto:Peavyhouse.Robert@epamail.epa.gov]  
Sent: Wednesday, August 15, 2012 2:16 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Re: VW Group - Simple question about Test Data (Fuel Economy)

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From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Robert Peavyhouse/AA/USEPA/US@EPA  
Date: 07/31/2012 01:54 PM  
Subject: VW Group - Simple question about Test Data (Fuel Economy)

Hello Jim and Robert,

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Thanks!  
Mike

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**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 8/16/2012 7:33:18 PM  
**Subject:** 2013 FE Guide - Data in Verify attached  
VW Group 2013 FE Guide--all-rel-dates-no-sales-8-16-2012.xlsx

Richard,

Here's the latest data in Verify---about 2 or 3PM, today. I didn't have time to clean up the duplicates, EV errors, color code the release dates, etc---it's just as output by the macro. I'm not sure what the error - Mfr vs EPA derived transmission differences is. It may be a problem with the macro. I thought we fixed the macro for that one two weeks ago.

Dave

EPA comn	VERIFY cc	Model Yr (Mfr Name	Division (1	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
Diesel; Err	Y	2013Audi	Audi	A3	ADX	73	2.0 4
Error - MFR vs EPA derived	2013	Audi	Audi	A3	ADX	59	2.0 4
		2013Audi	Audi	A3	ADX	58	2.0 4
Error - MFR vs EPA derived	2013	Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013Audi	Audi	A4	ADX	35	2.0 4
		2013Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013Audi	Audi	A5 Cabriolet	ADX	39	2.0 4
		2013Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013Audi	Audi	A6	ADX	65	2.0 4
		2013Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled	Y	2013Audi	Audi	A8	ADX	128	3.0 6
		2013Audi	Audi	A8	ADX	98	4.0 8
Relabeled	Y	2013Audi	Audi	A8L	ADX	129	3.0 6
		2013Audi	Audi	A8L	ADX	97	4.0 8
		2013Audi	Audi	A8L	ADX	109	6.3 12
		2013Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013Audi	Audi	Q5	ADX	91	2.0 4
Hybrid;		2013Audi	Audi	Q5 Hybrid	ADX	95	2.0 4
Diesel;		2013Audi	Audi	Q7	ADX	53	3.0 6
Error in RoY		2013Audi	Audi	Q7	ADX	61	3.0 6
Error - MFR vs EPA derived	2013	Audi	Audi	RS5	ADX	49	4.2 8
Error - MFR vs EPA derived	2013	Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
Error - MFR vs EPA derived	2013	Audi	Audi	S4	ADX	42	3.0 6
		2013Audi	Audi	S4	ADX	45	3.0 6
Error - MFR vs EPA derived	2013	Audi	Audi	S5	ADX	43	3.0 6
		2013Audi	Audi	S5	ADX	46	3.0 6
Error - MFR vs EPA derived	2013	Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
Error - MFR vs EPA derived	2013	Audi	Audi	S6	ADX	48	4.0 8
Error - MFR vs EPA derived	2013	Audi	Audi	S7	ADX	47	4.0 8
		2013Audi	Audi	S8	ADX	99	4.0 8
Error - MFR vs EPA derived	2013	Audi	Audi	TT Coupe	ADX	66	2.0 4
Error - MFR vs EPA derived	2013	Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013Audi	Audi	TTRS Coup	ADX	69	2.5 5
		2013Bentley	Bentley Motors	Continental	BEX	110	6.0 12
		2013Bentley	Bentley Motors	Continental	BEX	108	4.0 8
		2013Bentley	Bentley Motors	Continental	BEX	113	6.0 12
		2013Bentley	Bentley Motors	Continental	BEX	107	4.0 8
		2013Bentley	Bentley Motors	Continental	BEX	111	6.0 12
Error in coY		2013Bentley	Bentley Motors	Continental	BEX	112	6.0 12
		2013Bentley	Bentley Motors	Mulsanne	BEX	96	6.8 8

Error - MFR vs EPA derived	2013	Bugatti	Bugatti	Veyron	BGT	88	8.0	16
Error - MFIY	2013	Lamborghini	Lamborghini	Aventador	NLX	92	6.5	12
Error - MFR vs EPA derived	2013	Lamborghini	Lamborghini	Aventador	NLX	93	6.5	12
Error - MFR vs EPA derived	2013	Lamborghini	Lamborghini	Gallardo	CNLX	30	5.2	10
Error - saleY	2013	Lamborghini	Lamborghini	Gallardo	CNLX	32	5.2	10
Error - MFR vs EPA derived	2013	Lamborghini	Lamborghini	Gallardo	SNLX	31	5.2	10
Error - saleY	2013	Lamborghini	Lamborghini	Gallardo	SNLX	33	5.2	10
Diesel; Error - MFR vs EPA derived	2013	Volkswage	Volkswage	BEETLE	VWX	94	2.0	4
Error - MFR vs EPA derived	2013	Volkswage	Volkswage	BEETLE	VWX	19	2.0	4
Diesel; ErrY	2013	Volkswage	Volkswage	BEETLE	VWX	84	2.0	4
Error in anY	2013	Volkswage	Volkswage	BEETLE	VWX	89	2.0	4
Error in coiY	2013	Volkswage	Volkswage	BEETLE	VWX	17	2.5	5
	2013	Volkswage	Volkswage	BEETLE	VWX	27	2.5	5
Error - MFR vs EPA derived	2013	Volkswage	Volkswage	BEETLE	COVWX	20	2.0	4
Diesel; ErrY	2013	Volkswage	Volkswage	BEETLE	CVWX	85	2.0	4
	2013	Volkswage	Volkswage	BEETLE	COVWX	90	2.0	4
	2013	Volkswage	Volkswage	BEETLE	COVWX	18	2.5	5
Error - MFR vs EPA derived	2013	Volkswage	Volkswage	CC	VWX	1	2.0	4
	2013	Volkswage	Volkswage	CC	VWX	4	2.0	4
	2013	Volkswage	Volkswage	CC	VWX	2	3.6	6
	2013	Volkswage	Volkswage	CC 4MOTIK	VWX	3	3.6	6
Error - MFR vs EPA derived	2013	Volkswage	Volkswage	Eos	VWX	21	2.0	4
Diesel; ErrY	2013	Volkswage	Volkswage	GOLF	VWX	72	2.0	4
Diesel; ErrY	2013	Volkswage	Volkswage	GOLF	VWX	81	2.0	4
	2013	Volkswage	Volkswage	GOLF	VWX	16	2.5	5
	2013	Volkswage	Volkswage	GOLF	VWX	26	2.5	5
Error in coiY	2013	Volkswage	Volkswage	Golf R	VWX	57	2.0	4
Error - MFR vs EPA derived	2013	Volkswage	Volkswage	GTI	VWX	22	2.0	4
	2013	Volkswage	Volkswage	GTI	VWX	23	2.0	4
Diesel; ErrY	2013	Volkswage	Volkswage	Jetta	VWX	71	2.0	4
Error - MFR vs EPA derived	2013	Volkswage	Volkswage	Jetta	VWX	50	2.0	4
	2013	Volkswage	Volkswage	Jetta	VWX	86	2.0	4
	2013	Volkswage	Volkswage	Jetta	VWX	87	2.0	4
Diesel; ErrY	2013	Volkswage	Volkswage	Jetta	VWX	80	2.0	4
	2013	Volkswage	Volkswage	Jetta	VWX	51	2.0	4
	2013	Volkswage	Volkswage	Jetta	VWX	15	2.5	5
	2013	Volkswage	Volkswage	Jetta	VWX	25	2.5	5
Diesel; Error - MFR vs EPA derived	2013	Volkswage	Volkswage	JETTA SPO	VWX	74	2.0	4
Diesel; ErrY	2013	Volkswage	Volkswage	JETTA SP	VWX	79	2.0	4
	2013	Volkswage	Volkswage	JETTA SPO	VWX	14	2.5	5
	2013	Volkswage	Volkswage	JETTA SPO	VWX	24	2.5	5
Diesel; Error - MFR vs EPA derived	2013	Volkswage	Volkswage	Passat	VWX	62	2.0	4
Diesel;	2013	Volkswage	Volkswage	Passat	VWX	64	2.0	4
	2013	Volkswage	Volkswage	Passat	VWX	83	2.5	5
	2013	Volkswage	Volkswage	Passat	VWX	82	2.5	5
Error - MFR vs EPA derived	2013	Volkswage	Volkswage	Passat	VWX	63	3.6	6

Error in RoY	2013 Volkswagen	Volkswagen	TIGUAN VWX	68	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	TIGUAN VWX	56	2.0	4
Error in coiY	2013 Volkswagen	Volkswagen	TIGUAN 4I VWX	55	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	TOUAREG VWX	54	3.0	6
	2013 Volkswagen	Volkswagen	TOUAREG VWX	78	3.6	6
Hybrid;	2013 Volkswagen	Volkswagen	Touareg H VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(Please revise as needed.)	30	42	34				39.0935	59.3437	46.1856
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Manual(M	21	30	24				25.3	40.3	30.3902
Auto(AM-S	21	28	24				27.2	37.1	30.9119
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8) (600.314-08 states label values must not change for entire model year, except for 600-507(a) and 600-314-08(	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8) (600.314-08 states label values must not change for entire model year, except for 600-507(a) and 600-314-08(	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	24	30	26				30.4	39.9	34.048
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(AM-S	16	23	18				19.1	30	22.8332
Auto(AM-S	16	22	18				19.2	28.9	22.6159
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				20	33.4	24.4063
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				20	33.4	24.4063
Auto(AM-S	18	26	21				22.1	34.7	26.4165
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Manual(M	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	11	18	13				12.9	21.8	15.8033

Auto(AM-S	8	15	10	10	17.9	12.4782
le 676.2; Please revise Verify as needed.	11	18	13	12.6	25.2	16.2581
Auto(AM-S	10	16	12	11.5	21.2	14.4817
Auto(AM-S	13	20	16	16.1	25.4	19.276
re not offered for sale in the US; Error in combined unrounded adjusted CO2 value, we calculate 633.6; Please revise	12	20	15	14	24	17.2308
Manual(M	13	20	16	16	25.4	19.197
re not offered for sale in the US; Error in combined unrounded adjusted CO2 value, we calculate 625.8; Please revise	12	20	14	13	22.8	16.722
Manual(M	29	39	32	37.3	55.3	43.7011
Auto(AM-S	22	30	25	26.5	42.0656	31.7942
Manual(M	28	41	32	36.066	57.9978	43.4617
Manual(M	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
Manual(M	28	41	32	36.066	57.9978	43.4617
Manual(M	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Manual(M	19	27	22	23.9	37.1	28.456
Auto(AM-S	24	33	27	29.9333	43.5096	34.8229
Manual(M	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M	24	34	28	28.8	46.2	34.6771
Manual(M	30	42	34	38.747	59.8138	46.0447
Manual(M	22	33	26	26.5556	44.9945	32.56
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	29	39	33	37.6	56.2	44.1798
Manual(M	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S	20	28	23	23.9	37.3	28.5088

Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

calculate 343; Please revise Verify as needed.



City	Model	Year	Comb	Unr	Guzzler?	Air Aspir	IAir Aspir	Trans	Trans Des	Trans, Otr	# Gears
29.8946	41.5209	34.2046				TC	Turbochar	AMS	Automated		6
21.3388	27.7919	23.8286				TC	Turbochar	AMS	Automated		6
20.8146	29.9953	24.1394				TC	Turbochar	M	Manual		6
20.891	28.1035	23.6187				TC	Turbochar	AMS	Automated		6
23.6355	30.6684	26.3554				TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049				TC	Turbochar	M	Manual		6
23.6355	30.6684	26.3554				TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049				TC	Turbochar	M	Manual		6
24.5044	32.5529	27.5721				TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
18.3949	27.2332	21.5408				SC	Superchar	SA	Semi-Auto		8
17.8058	27.5484	21.1758				SC	Superchar	SA	Semi-Auto		8
e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in combined unr	17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in combined unr	17.2616	28.4347	20.9695			TC	Turbochar	SA	Semi-Auto		8
e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in combined unr	17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
16.0273	25.8053	19.3219				TC	Turbochar	SA	Semi-Auto		8
13.1387	20.6025	15.6978	G			NA	Naturally	SA	Semi-Auto		8
19.9584	26.6824	22.5112				TC	Turbochar	SA	Semi-Auto		8
19.7289	28.2351	22.823				TC	Turbochar	SA	Semi-Auto		8
24.0075	29.7936	26.3065				TC	Turbochar	SA	Semi-Auto		8
18.74	27.62	21.9099				TC	Turbochar	SA	Semi-Auto		8
15.522	21.5458	17.7559				SC	Superchar	SA	Semi-Auto		8
15.7409	23.3075	18.4339				NA	Naturally	AMS	Automated		7
15.8793	22.1836	18.2078				NA	Naturally	AMS	Automated		7
18.117	27.558	21.419				SC	Superchar	AMS	Automated		7
17.0438	26.023	20.1767				SC	Superchar	M	Manual		6
18.117	27.558	21.419				SC	Superchar	AMS	Automated		7
17.0438	26.023	20.1767				SC	Superchar	M	Manual		6
17.6699	25.953	20.6333				SC	Superchar	AMS	Automated		7
16.761	26.9697	20.2022				TC	Turbochar	AMS	Automated		7
16.761	26.9697	20.2022				TC	Turbochar	AMS	Automated		7
15.2801	25.5632	18.6574				TC	Turbochar	SA	Semi-Auto		8
22.407	31.1674	25.6515				TC	Turbochar	AMS	Automated		6
22.407	31.1674	25.6515				TC	Turbochar	AMS	Automated		6
17.751	25.2021	20.4751				TC	Turbochar	M	Manual		6
11.2476	18.7327	13.7134	G			TC	Turbochar	SA	Semi-Auto		6
15.0109	24.4645	18.1706				TC	Turbochar	SA	Semi-Auto		8
11.5043	18.877	13.9574	G			TC	Turbochar	SA	Semi-Auto		6
14.0639	23.9773	17.2766	G			TC	Turbochar	SA	Semi-Auto		8
11.2476	18.7327	13.7134	G			TC	Turbochar	SA	Semi-Auto		6
11.5043	18.877	13.9574	G			TC	Turbochar	SA	Semi-Auto		6
10.5402	17.7129	12.8889	G			TC	Turbochar	SA	Semi-Auto		8

8.4232	14.7698	10.4424G	TC	TurbochariAMS	Automatec	7
10.6055	18.4729	13.1199G	NA	Naturally AAMS	Automated	7
9.7957	16.2453	11.9264G	NA	Naturally AAMS	Automatec	7
13.4655	19.7573	15.718G	NA	Naturally AAMS	Automatec	6
Verify as needed 12.0883	19.9831	14.7021G	NA	Naturally AM	Manual	6
13.3954	19.7741	15.6701G	NA	Naturally AAMS	Automatec	6
Verify as needed 13.388	19.6451	14.1465G	NA	Naturally AM	Manual	6
28.6469	38.87	32.4925	TC	TurbochariAMS	Automatec	6
22.0202	29.5574	24.8746	TC	TurbochariAMS	Automatec	6
27.8088	40.6616	32.4203	TC	TurbochariM	Manual	6
20.5408	29.7034	23.8517	TC	TurbochariM	Manual	6
22.2864	28.5683	24.7338	NA	Naturally ASA	Semi-Auto	6
21.7201	30.6767	25.0054	NA	Naturally FM	Manual	5
21.1383	28.6751	23.9738	TC	TurbochariAMS	Automatec	6
27.8088	40.6616	32.4203	TC	TurbochariM	Manual	6
20.5408	29.7034	23.8517	TC	TurbochariM	Manual	6
21.2302	26.9749	23.4804	NA	Naturally ASA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	TurbochariAMS	Automatec	6
20.8232	31.7255	24.6324	TC	TurbochariM	Manual	6
17.4935	26.5716	20.6716	NA	Naturally ASA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally ASA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	TurbochariAMS	Automatec	6
29.8946	41.5209	34.2046	TC	TurbochariAMS	Automated	6
29.6183	41.8508	34.104	TC	TurbochariM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally FM	Manual	5
19.278	26.8882	22.0917	TC	TurbochariM	Manual	6
24.2237	32.5108	27.3624	TC	TurbochariAMS	Automatec	6
21.2839	30.8324	24.7304	TC	TurbochariM	Manual	6
29.8946	41.5209	34.2046	TC	TurbochariAMS	Automated	6
23.7854	31.6043	26.7652	TC	TurbochariAMS	Automatec	6
23.1009	29.1554	25.4822	NA	Naturally ASA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally FM	Manual	5
29.6183	41.8508	34.104	TC	TurbochariM	Manual	6
21.8931	32.6043	25.6912	TC	TurbochariM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally FM	Manual	5
28.8556	39.4682	32.8278	TC	TurbochariAMS	Automatec	6
29.6183	41.8508	34.104	TC	TurbochariM	Manual	6
23.6446	31.0458	26.486	NA	Naturally ASA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally FM	Manual	5
30.4633	40.2057	34.1916	TC	TurbochariAMS	Automatec	6
30.8024	42.6219	35.1943	TC	TurbochariM	Manual	6
22.1078	30.6611	25.2814	NA	Naturally ASA	Semi-Auto	6
21.8993	32.1378	25.5642	NA	Naturally FM	Manual	5
19.7174	27.8048	22.6868	NA	Naturally AAMS	Automatec	6

20.6233	26.0617	22.7606	TC	TurbocharçSA	Semi-Auto	6
18.1488	26.2617	21.0791	TC	TurbocharçM	Manual	6
20.402	25.8545	22.5412	TC	TurbocharçSA	Semi-Auto	6
19.649	28.9961	22.9829	TC	TurbocharçSA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally #SA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	SupercharçSA	Semi-Auto	8

Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Automated Manual with paddles)	N	F	2-Wheel DDVWV02.0U5N			5	DU	Diesel, ultr	
Automated Manual with paddles)	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
N	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
ounded unadjusted CO2 value, we calculate 323.8. Error in combined unrounded adjusted CO2 value, we calculate 4									
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
ounded unadjusted CO2 value, we calculate 323.8. Error in combined unrounded adjusted CO2 value, we calculate 4									
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDVW XV06.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT03.03UG			5	DU	Diesel, ultr	
Y	N	A	All Wheel IDAD XT03.0		10		GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Y	N	R	2-Wheel DDBEXV06.0		10		GP	Gasoline (F	

Automated Manual with paddles)	All Wheel	IDBGT	V08.0	10		GPR	Gasoline (F	
Automated Manual with paddles)	All Wheel	IDNLX	V06.0	10		GPR	Gasoline (I	
Automated Manual with paddles)	All Wheel	IDNLX	V06.5	10		GPR	Gasoline (F	
Automated Manual with paddles)	All Wheel	IDADX	V05.1	10		GP	Gasoline (F	
N	N	A	All Wheel	IDADX	V05.1	GP	Gasoline (I	
Automated Manual with paddles)	All Wheel	IDADX	V05.1	10		GP	Gasoline (F	
N	N	A	All Wheel	IDADX	V05.1	GP	Gasoline (I	
Automated Manual with paddles)	2-Wheel	DDVWX	V02.0U5N		5	DU	Diesel, ultr	
Automated Manual with paddles)	2-Wheel	DDVWX	J02.0	10		GP	Gasoline (F	
N	N	F	2-Wheel	DDVWX	V02.0U5N	5	DU	Diesel, ultr
N	N	F	2-Wheel	DDVWX	J02.0	GP	Gasoline (I	
Y	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (I	
N	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
Automated Manual with paddles)	2-Wheel	DDVWX	J02.0	10		GP	Gasoline (F	
N	N	F	2-Wheel	DDVWX	V02.0U5N	5	DU	Diesel, ultr
N	N	F	2-Wheel	DDVWX	J02.0	GP	Gasoline (F	
Y	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
Automated Manual with paddles)	2-Wheel	DDVWX	J02.0	10		GP	Gasoline (F	
N	N	F	2-Wheel	DDVWX	J02.0	GP	Gasoline (F	
Y	N	F	2-Wheel	DDVWX	V03.0	GP	Gasoline (F	
Y	N	A	All Wheel	IDVWX	V03.0	GP	Gasoline (F	
Automated Manual with paddles)	2-Wheel	DDVWX	V02.0	10		GP	Gasoline (F	
Automated Manual with paddles)	2-Wheel	DDVWX	V02.0U5N		5	DU	Diesel, ultr	
N	N	F	2-Wheel	DDVWX	V02.0U5N	5	DU	Diesel, ultr
Y	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
N	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
N	N	A	All Wheel	IDADX	V02.0	GP	Gasoline (I	
Automated Manual with paddles)	2-Wheel	DDADX	V02.0	10		GP	Gasoline (F	
N	N	F	2-Wheel	DDADX	V02.0	GP	Gasoline (F	
Automated Manual with paddles)	2-Wheel	DDVWX	V02.0U5N		5	DU	Diesel, ultr	
Automated Manual with paddles)	2-Wheel	DDVWX	J02.0	10		GP	Gasoline (F	
Y	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
N	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
N	N	F	2-Wheel	DDVWX	V02.0U5N	5	DU	Diesel, ultr
N	N	F	2-Wheel	DDVWX	J02.0	GP	Gasoline (F	
Y	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
N	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
Automated Manual with paddles)	2-Wheel	DDVWX	V02.0U5N		5	DU	Diesel, ultr	
N	N	F	2-Wheel	DDVWX	V02.0U5N	5	DU	Diesel, ultr
Y	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
N	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
Automated Manual with paddles)	2-Wheel	DDVWX	V02.0U4S		5	DU	Diesel, ultr	
N	N	F	2-Wheel	DDVWX	V02.0U4S	5	DU	Diesel, ultr
Y	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
N	N	F	2-Wheel	DDVWX	V02.0	G	Gasoline (F	
Automated Manual with paddles)	2-Wheel	DDVWX	V03.0	10		GP	Gasoline (F	

Y	N	F	2-Wheel DDVWXJ02.	10		GP	Gasoline (I
N	N	F	2-Wheel DDVWXJ02.	10		GP	Gasoline (I
Y	N	A	All Wheel IDVWXJ02.	10		GP	Gasoline (I
Y	N	A	All Wheel IDADXT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F

MPG (15 miles per gallon)	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MPG (15 miles per gallon)	Not exempt		89	20				
MPG (15 miles per gallon)	Not exempt		89	20				
MPG (15 miles per gallon)	Not exempt		89	20				
MPG (15 miles per gallon)	Not exempt				89	20		
MPG (15 miles per gallon)	Not exempt				91	12		
MPG (15 miles per gallon)	Not exempt				91	12		
MPG (15 miles per gallon)	Not exempt				91	12		
MPG (15 miles per gallon)	Not exempt		81	10				
MPG (15 miles per gallon)	Not exempt		81	10				
MPG (15 miles per gallon)	Not exempt		84	12				
MPG (15 miles per gallon)	Not exempt		84	12				
MPG (15 miles per gallon)	Not exempt				98	16		
MPG (15 miles per gallon)	Not exempt				98	16		
MPG (15 miles per gallon)	Not exempt				98	16		
MPG (15 miles per gallon)	Not exempt						94	25
MPG (15 miles per gallon)	Not exempt				100	15		
MPG (15 miles per gallon)	Not exempt				100	15		
MPG (15 miles per gallon)	Not exempt				107	15		
MPG (15 miles per gallon)	Not exempt				107	15		
MPG (15 miles per gallon)	Not exempt				107	15		
MPG (15 miles per gallon)	Not exempt				90	28		
MPG (15 miles per gallon)	Truck							
MPG (15 miles per gallon)	Truck							
MPG (15 miles per gallon)	Truck							
MPG (15 miles per gallon)	Truck							
MPG (15 miles per gallon)	Not exempt		84	13				
MPG (15 miles per gallon)	Not exempt		81	10				
MPG (15 miles per gallon)	Not exempt				90	13		
MPG (15 miles per gallon)	Not exempt				90	13		
MPG (15 miles per gallon)	Not exempt		84	13				
MPG (15 miles per gallon)	Not exempt		84	13				
MPG (15 miles per gallon)	Not exempt		81	10				
MPG (15 miles per gallon)	Not exempt				98	16		
MPG (15 miles per gallon)	Not exempt						94	25
MPG (15 miles per gallon)	Not exempt				100	15		
MPG (15 miles per gallon)	Not exempt		74	13				
MPG (15 miles per gallon)	Not exempt							
MPG (15 miles per gallon)	Not exempt						74	13
MPG (15 miles per gallon)	Not exempt		102	13				
MPG (15 miles per gallon)	Not exempt		89	11				
MPG (15 miles per gallon)	Not exempt		89	11				
MPG (15 miles per gallon)	Not exempt		86	7				
MPG (15 miles per gallon)	Not exempt		86	7				
MPG (15 miles per gallon)	Not exempt		86	7				
MPG (15 miles per gallon)	Not exempt				100	11		

Mileage (Required)	Not exempt		
Mileage (Unleaded, Required)	Not exempt		
Mileage (Required)	Not exempt		
Mileage (Recommended)	Not exempt		
Mileage (Unleaded, Recommended)	Not exempt		
Mileage (Recommended)	Not exempt		
Mileage (Recommended)	Not exempt		
Mileage (15 ppm maximum)	Not exempt	85	15
Mileage (Recommended)	Not exempt	85	15
Mileage (15 ppm maximum)	Not exempt	85	15
Mileage (Recommended)	Not exempt	85	15
Mileage (Recommended)	Not exempt	85	15
Mileage (Recommended)	Not exempt	85	15
Mileage (Recommended)	Not exempt	81	7
Mileage (15 ppm maximum)	Not exempt	81	7
Mileage (Recommended)	Not exempt	81	7
Mileage (Recommended)	Not exempt	81	7
Mileage (Recommended)	Not exempt	94	13
Mileage (Recommended)	Not exempt	94	13
Mileage (Recommended)	Not exempt	94	13
Mileage (Recommended)	Not exempt	94	13
Mileage (Recommended)	Not exempt	77	11
Mileage (15 ppm maximum)	Not exempt	94	15
Mileage (15 ppm maximum)	Not exempt	94	15
Mileage (Recommended)	Not exempt	94	15
Mileage (Recommended)	Not exempt	94	15
Mileage (Unleaded, Recommended)	Not exempt	94	15
Mileage (Recommended)	Not exempt	94	15
Mileage (Recommended)	Not exempt	94	15
Mileage (15 ppm maximum)	Not exempt	94	16
Mileage (Recommended)	Not exempt	94	16
Mileage (Recommended)	Not exempt	94	16
Mileage (Recommended)	Not exempt	94	16
Mileage (15 ppm maximum)	Not exempt	94	16
Mileage (Recommended)	Not exempt	94	16
Mileage (Recommended)	Not exempt	94	16
Mileage (Recommended)	Not exempt	94	16
Mileage (15 ppm maximum)	Not exempt	92	33
Mileage (15 ppm maximum)	Not exempt	92	33
Mileage (Recommended)	Not exempt	92	33
Mileage (Recommended)	Not exempt	92	33
Mileage (15 ppm maximum)	Not exempt	102	16
Mileage (15 ppm maximum)	Not exempt	102	16
Mileage (Recommended)	Not exempt	102	16
Mileage (Recommended)	Not exempt	102	16
Mileage (Recommended)	Not exempt	102	16



Mileage (Unleaded, Recommended)	Truck
Mileage (Unleaded, Recommended)	Truck
Mileage (Unleaded, Recommended)	Truck
Mileage (15 mpg maximum)	Truck
Mileage (Unleaded, Recommended)	Truck
Mileage (Unleaded, Recommended)	Truck

Annual Fuel Economy	EPA Calculation	Comment	City2 FE (l/100mi)	Hwy2 FE (l/100mi)	Comb2 FE (l/100mi)	Low'd City (l/100mi)	Low'd Hwy (l/100mi)	Low'd Cor (l/100mi)	City2 Unadj (l/100mi)
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation							
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C							
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values							
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v							
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unrnd							
2400	2400	added A6 quattro configuartion data to the base level, corrected gas guzzler MPG valuwe and							
2200	2200								
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th							
2400	2400	added A6 quattro configuartion data to the base level; corrected gas guzzler MPG valuwe and							
2400	2400	added A6 quattro configuartion data to the base level; corrected gas guzzler MPG valuwe and							
2200	2200								
2050	2050	corrected forward speeds to 8, for this CVT trans							
2400	2400	corrected gas guzzler MPG valuwe and gallons per 100 value...these values were switched							
2600	2600								
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes							
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to							
2700	2700	S/S set to yes							
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrnd city CO2 value corrected, S							
3000	3000	S/S set to yes							
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con							
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c							
2500	2500	corrected unadj unrounded highway and conbined values							
2200	2200								
2600	2600	CO2 corrections, additonal fuel costs in saving field, corrected Aug 14th							
3150	3150	CO2 corrections, again Aug 14th							
3150	3150	CO2 corrections							
3150	3150	corrected city CO2 value, typo							
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una							
2700	2700	corrected city unadj unrounded CO2 , Aug 14th							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una							
2700	2700	corrected unadj and adj CO2 values, Aug 14th							
2850	2850	CO2 corrections							
2850	2850	CO2 corrections							
3000	3000								
2200	2200	CO2 corrections, Aug 14th correction							
2200	2200	CO2 corrections, Aug 14th							
2850	2850								
4050	4050	corrected i8	13	10				9.5	
3150	3150								
4050	4050	correct adj8	14	10				10.3	
3350	3350								
4050	4050	corrected i8	13	10				9.5	
4050	4050	8	14	10				10.3	
4400	4400								

5700 5700 corrected lock out to "yes" and AMS.  
 4400 4400 lock up to YES., CO2 corrections Aug 14, S/S set to yes  
 4750 4750 adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes  
 3550 3550 corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th  
 3800 3800  
 3550 3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
 4050 4050  
 1800 1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
 2300 2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 corrected CO2 values  
 2150 2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
 2150 2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
 2400 2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 CO2 corrections, fuel spending corrected to \$400  
 2300 2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
 2300 2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
 2300 2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
 2700 2700 update after Verify release 10  
 2850 2850 UPDATE after Verify release 10  
 2300 2300 CO2 corrections  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 comb correction  
 2600 2600 CO2 corrections  
 2100 2100 CO2 corrections  
 2300 2300 early label, update after Verify release 10  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation  
 2100 2100 corrected unadjusted unrounded CO2 highway and combined values and combined adjusted w  
 2150 2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
 1900 1900 FE and GHG ratings corrected to 7  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th  
 2200 2200 CO2 corrections  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1750 1750 CO2 corrections; inhouse derived 5-cycle formula corrected Aug 15th  
 1700 1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1700 1700  
 1650 1650  
 2150 2150 CO2 corrections  
 2050 2050 CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
 2500 2500 CO2 correction

2500	2500 corrected CO2 values
2700	2700 CO2 corrections
2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections
2500	2500 CO2 corrections
3000	3000 CO2 correction Aug 15th
2700	2700 CO2 corrections

16V 100% Ethanol (E100) Alternative Fuel  
Hwy2 City2 Comb2 OffHwy2 City2 OffHwy2 City2 OffHwy2 City2 Off Range2 - Fuel2 Use2 Fuel2 Use2 Fuel2 Unit Fuel2 Unit

O2

alue

ded CO2 value again, second time Aug 14th  
gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
gallons per 100 value...these values were switched

yes

/S set to yes

sumption to 6.2 per ASTM rounding procedure  
ity and highway CO2 values

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E100)	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E100)	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E100)	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E100)	miles per g

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th

roup

nrounded highway and combined CO2 values

o 29 MPG

ycle formular corrected Aug 15th

ed MPG value

nd corresponding 5-cycle values

cted calculated values

hole CO2 value



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	2	21	Two Seate
	2	21	Two Seate
	2	21	Two Seate
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seate
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	23	Subcompa
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
	1	14	Compact C
	1	14	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
SIDI;	2	25	Midsize Ca

SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Derived 5-cycle label 6/22/2012	12150		N	N	
cars	Vehicle Specific 5-cycle 6/11/2012	11328		N	N	
cars	Vehicle Specific 5-cycle 6/11/2012	11302		N	N	
cars	Vehicle Specific 5-cycle 6/11/2012	11487		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12092		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10360		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	9974		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12093		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10362		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10363		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	9976		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	11491		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10364		N	N	
car	Derived 5-cycle label 6/25/2012	10288		N	N	
car	Vehicle Specific 5-cycle 6/21/2012	12228		N	N	
car	Vehicle Specific 5-cycle 6/21/2012	12229		N	N	
car	Vehicle Specific 5-cycle 6/21/2012	12227		N	N	
car	Vehicle Specific 5-cycle 6/21/2012	12230		N	N	
car	Vehicle Specific 5-cycle 6/15/2012	12226		N	N	
car	Vehicle Specific 5-cycle 6/15/2012	10646		N	N	
cars	Derived 5-cycle label 4/26/2012	11490		N	N	
	Vehicle Specific 5-cycle 7/13/2012	11319		N	N	
	Vehicle Specific 5-cycle 9/28/2012	12158		N	N	
D	Vehicle Specific 5-cycle 7/16/2012	12105		N	N	
D	Derived 5-cycle label 6/11/2012	12103		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	11510		N	N	
car	Vehicle Specific 5-cycle 7/13/2012	10452		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12106		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	11284		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12108		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	11285		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12111		N	N	
car	Vehicle Specific 5-cycle 7/30/2012	11513		N	N	
car	Vehicle Specific 5-cycle 7/30/2012	11512		N	N	
car	Vehicle Specific 5-cycle 8/27/2012	12122		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	12115		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	12113		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	10200		N	N	
car	Vehicle Specific 5-cycle 7/30/2012	12116		N	N	
car	Vehicle Specific 5-cycle 4/9/2012	10208		N	N	
car	Vehicle Specific 5-cycle 7/30/2012	12119		N	N	
car	Vehicle Specific 5-cycle 4/9/2012	10207		N	N	
car	Vehicle Specific 5-cycle 7/30/2012	12117		N	N	
car	Vehicle Specific 5-cycle 8/20/2012	10184		N	N	
car	Vehicle Specific 5-cycle 8/20/2012	12211		N	N	

car	Vehicle Specific 5-cycle	7/12/2012	11087		N	N
car	Vehicle Specific 5-cycle	8/7/2012	12233		N	N
car	Vehicle Specific 5-cycle	1/14/2013	12234		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12128		N	N
car	Vehicle Specific 5-cycle	6/22/2012	10237		N	N
car	Vehicle Specific 5-cycle	6/22/2012	12130		N	N
car	Vehicle Specific 5-cycle	6/22/2012	10238		N	N
car	Derived 5-cycle label	7/19/2012	12135		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187		N	N
car	Derived 5-cycle label	6/25/2012	12155		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11525		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10751		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373		N	N
car	Derived 5-cycle label	7/30/2012	10277		N	N
car	Derived 5-cycle label	6/25/2012	12156		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287		N	N
car	Vehicle Specific 5-cycle	1/16/2012	10186		N	N
car	Vehicle Specific 5-cycle	1/25/2012	11044		N	N
car	Vehicle Specific 5-cycle	1/16/2012	10532		N	N
car	Vehicle Specific 5-cycle	1/16/2012	10534		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527		N	N
car	Derived 5-cycle label	6/22/2012	12149		N	N
car	Derived 5-cycle label	6/25/2012	12154		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11530		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11531		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531		N	N
car	Derived 5-cycle label	6/22/2012	12148		N	N
car	Vehicle Specific 5-cycle	6/18/2012	11372		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300		N	N
car	Derived 5-cycle label	6/25/2012	12153		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11532		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535		N	N
cars	Derived 5-cycle label	6/25/2012	12151		N	N
cars	Derived 5-cycle label	6/25/2012	12152		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11534		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11536		N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11539		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11547		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554		N	N

	Derived 5-cycle label 6/18/2012	11556		N	N
	Vehicle Specific 5-cycle label 6/18/2012	11558		N	N
	Derived 5-cycle label 6/11/2012	12157		N	N
D	Vehicle Specific 5-cycle label 6/18/2012	11563		N	N
D	Derived 5-cycle label 6/25/2012	12162		N	N
D	Derived 5-cycle label 6/25/2012	11559		N	N

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N	N	CHARGE A	N	Y	INLET AND
N	N	Y	ELECTRO	Y	HYDRAUL
N	N	Y	ELECTRON	Y	HYDRAUL
N	N	ENGINE C	N	Y	INLET AND
N	N	ENGINE C	N	Y	INLET AN
N	N	ENGINE C	N	Y	INLET AND
N	N	ENGINE C	N	Y	INLET AN
N	N	N	N	N	N
N	N	N	N	Y	position of
N	N	N	N	N	N
N	N	N	N	Y	position of
N	N	N	N	Y	INLET CO
N	N	N	N	Y	INLET CON
N	N	N	N	Y	position of
N	N	N	N	N	N
N	N	N	N	Y	position of
N	N	N	N	Y	position of
N	N	N	N	Y	position of
N	N	N	N	Y	position of
N	N	N	N	Y	position of
N	N	N	N	Y	CONTINU
N	N	N	N	N	N
N	N	N	N	N	N
N	N	N	N	Y	INLET CON
N	N	N	N	Y	INLET CON
N	N	ENGINE C	N	Y	CONTINU
N	N	ENGINE C	N	Y	CONTINU
N	N	ENGINE C	N	Y	CONTINU
N	N	N	N	N	N
N	N	N	N	Y	position of
N	N	N	N	N	N
N	N	N	N	N	N
N	N	N	N	N	N
N	N	N	N	Y	position of
N	N	N	N	Y	INLET CON
N	N	N	N	Y	INLET CON
N	N	N	N	N	N
N	N	N	N	N	N
N	N	N	N	Y	INLET CON
N	N	N	N	Y	INLET CON
N	N	SCR Equip	N	N	N
N	N	SCR Equip	N	N	N
N	N	N	N	Y	INLET CON
N	N	N	N	Y	INLET CON
N	N	N	N	Y	Electronic

N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	INTAKE / EN	
N	N	V6 CYLIND N	Y	MECHANICAL	Battery(s)



Device Descri	Battery	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit
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These observations are for the purpose of the investigation only and are not to be used for any other purpose. The data are not to be used for any other purpose.

1 Lithium Ion	266	5	37 On-Board
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These observations are for the purpose of the investigation only and are not to be used for any other purpose. The data are not to be used for any other purpose.

STMENT

MECHANICAL-HYDRAULIC

These observations are for the purpose of the investigation only and are not to be used for any other purpose. The data are not to be used for any other purpose.

MECHANICAL-HYDRAULIC

These observations are for the purpose of the investigation only and are not to be used for any other purpose. The data are not to be used for any other purpose.

MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

adjust valves on a single camshaft. No change in valve overlaps.

MECHANICAL-HYDRAULIC  
VALVE CONTINUOUSLY VVT  
CONTINUOUSLY VVT  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
AL HYDRAULIC

YDRAULIC  
controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC  
controlled and hydraulically adjusted  
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YDRAULIC  
YDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
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YDRAULIC

YDRAULIC  
YDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

LICALLY AND CONTROLLED ELECTRONICALLY

AMS	1 NiMH	288	6	21.5 On-Board
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es(2)ine3 od gear at this loer, FGT grea tter by lin 4EC, h ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, FGT grea tter by lin 4EC, h ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical R Both Y 1 AC Inductio

es(2)ine3 od gear at this loer, FGT grea tter by lin 4EC, h ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, FGT grea tter by lin 4EC, h ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, FGT grea tter by lin 4EC, h ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, FGT grea tter by lin 4EC, h ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, FGT grea tter by lin 4EC, h ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km



Other BRAKE PEBoth N

1Other

Motor	Ger	Rated Mot	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Cell V	Off Board	Camless V	Oil Viscosi
h		40				CRDI	Common FN		N	5W40
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit N		N	5W40
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
h		40				GDI	Spark Ignit N	N	N	5W40 VW
						CRDI	Common F		N	5W30 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W30 VW
						GDI	Spark Ignit		N	5W30 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
						GDI	Spark Ignit		N	5W40 VW
h		40				GDI	Spark Ignit N	N	N	5W40
						GDI	Spark Ignit N		N	5W40
						GDI	Spark Ignit N	N	N	5W40 VW
						MFI	Multipoint N		N	5W30 VW
						GDI	Spark Ignit		N	5W30 VW
						MFI	Multipoint N		N	5W30 VW
						GDI	Spark Ignit		N	5W30 VW
						MFI	Multipoint N		N	5W30 VW
						MFI	Multipoint/N		N	5W30 VW
						MFI	Multipoint		N	0W40 / VW

MFI	Multipoint		N	10W60 VW
MFI	Multipoint/	N	N	5W30 VW
MFI	Multipoint	N	N	5W30 VW
GDI	Spark Ignit		N	10W60 VW
GDI	Spark Ignit		N	10W60 VW
GDI	Spark Ignit		N	10W60 VW
GDI	Spark Ignit		N	10W60 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
MFI	Multipoint/		N	10W40 / V
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W-40 VW
GDI	Spark Ignit		N	5W-40 VW
GDI	Spark Ignit		N	5W40 / VW
CRDI	Common FN		N	5W40
CRDI	Common FN		N	5W40
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
GDI	Spark IgnitN		N	5W40
GDI	Spark IgnitN		N	5W40
GDI	Spark IgnitN		N	5W40
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
MFI	Multipoint		N	5W40 VW
MFI	Multipoint		N	5W40 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
CRDI	Common FN		N	5W40
CRDI	Common FN		N	5W40
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
CRDI	Common F		N	5W40 VW
CRDI	Common F		N	5W40 VW
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40 VW



3 PHASE CI	34	GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark Ignit		N	5W40 VW
		CRDI	Common F		N	5W30 VW
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark IgnitN	N	N	5W40 VW

Stop/StartStop/StartTrans in FETrans as IModel TypCharge De Charge De Charge SuCharge SuEPA Calcul

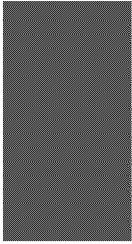
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N	No	Auto(S8) Auto(S8)
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Y	Yes	Auto(S8) Auto(S8)
Y	Yes	Auto(S8) Auto(S8)
Y0700	Yes	Auto(S8) Auto(S8)
Y	Yes	Auto(S8) Auto(S8)
Y0700	Yes	Auto(S8) Auto(S8)
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Y0700	No	Auto(S8) Auto(S8)

50500	No	Auto(AM-5Automatec
50700	Yes	Auto(AM-5Automated
50700	Yes	Auto(AM-5Automatec
50500	No	Auto(AM-5Automatec
50500	No	Manual(MManual(MGallardo C
50500	No	Auto(AM-5Automatec
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N	No	Manual(M Manual(M
N	No	Auto(S6) Auto(S6)
N	No	Manual(M Manual(M
N	No	Auto(AM-5Automatec

N	No	Auto(S6)	Auto(S6)	Tiguan for
N	No	Manual(M6)	Manual(M6)	
N	No	Auto(S6)	Auto(S6)	
N	No	Auto(S8)	Auto(S8)	
N	No	Auto(S8)	Auto(S8)	
N	No	Auto(S8)	Auto(S8)	Touareg H

Model Year	Model	EPA Calculated Gas Mileage (mpg)	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
46.2			9	8DVWXV02	5		
30.8			6	6DADXV02.0	7		
30.4			6	6DADXV02.0	7		
30.9			6	6DADXV02.0	5		
35.2			7	7DADXV02.0	5		
30.8			6	6DADXV02.0	5		
33.2			7	7DADXV02.0	5		
35.2			7	7DADXV02.0	5		
30.8			6	6DADXV02.0	5		
30.8			6	6DADXV02.0	5		
33.2			7	7DADXV02.0	5		
36.9			7	7DADXV02.0	5		
30.8			6	6DADXV02.0	5		
28.1			5	5DADXJ03.0	5		
27.5			5	5DADXJ03.0	5		
27.5			5	5DADXJ03.0	5		
27.1			5	5DADXV04.0	5		
27.5			5	5DADXJ03.0	5		
24.4			4	4DADXV04.0	5		
19.3			3	3DVWXV06.0	5		
29.5			6	6DADXV02.0	5		
28.8			6	6DADXT02.0	5		
34			7	7DADXT02.0	5		
28.1			5	4DADXT03.0	5		
22.9			4	4DADXT03.0	5		
23			4	4DADXV04.0	5		
22.6			4	4DADXV04.0	5		
26.9			5	5DADXJ03.0	5		
23.5			5	5DADXJ03.0	5		
26.9			5	5DADXJ03.0	5		
23.5			5	5DADXJ03.0	5		
26.4			5	5DADXJ03.0	5		
25.5			5	5DADXV04.0	5		
25.5			5	5DADXV04.0	5		
23.6			4	4DADXV04.0	5		
33.3			7	7DADXV02.0	5		
33.3			7	7DADXV02.0	5		
25.6			5	5DADXV02.0	5		
17.2			2	2DBEXV06.0	5		
23.6			4	4DADXV04.0	5		
17.4			2	2DBEXV06.0	5		
21.8			4	4DADXV04.0	5		
17.2			2	2DBEXV06.0	5		
17.4			2	2DBEXV06.0	5		
15.9			2	2DBEXV06.0	5		

12.6		1	1DBGTV08.0	5
16.4		2	2DNLXV06.0	5
14.5		1	1DNLXV06.5	5
19.4		3	3DADXV05.0	5
17.4		3	3DADXV05.0	5
19.3		3	3DADXV05.0	5
16.1		2	2DADXV05.0	5
43.7		8	7DVWXV02.0	5
31.8		6	6DVWXV02.0	7
43.4		8	7DVWXV02.0	5
30.7		6	6DVWXV02.0	7
31.6		6	6DVWXV02.0	7
31.9		6	6DVWXV02.0	7
31.5		6	6DVWXV02.0	7
43.4		8	7DVWXV02.0	5
30.7		6	6DVWXV02.0	7
30.3		6	6DVWXV02.0	7
32.3		6	6DVWXV02.0	7
31.8		6	6DVWXV02.0	7
25.8		5	5DVWXV03.0	5
24.8		5	5DVWXV03.0	5
32.4		6	6DVWXV02.0	5
46.2		9	8DVWXV02.0	5
46		9	8DVWXV02.0	5
33.1		7	7DVWXV02.0	7
32.2		7	7DVWXV02.0	7
28.5		5	5DADXV02.0	5
34.8		7	7DADXV02.0	7
31.2		6	6DADXV02.0	7
46.2		9	8DVWXV02.0	5
35		7	7DVWXV02.0	7
32.9		6	6DVWXV02.0	5
34.7		7	7DVWXV02.0	5
46		9	8DVWXV02.0	5
32.6		7	7DVWXV02.0	7
33.1		7	7DVWXV02.0	7
32.2		7	7DVWXV02.0	7
44.2		8	7DVWXV02.0	5
46		9	8DVWXV02.0	5
33.1		7	7DVWXV02.0	7
32.2		7	7DVWXV02.0	7
44.6		9	8DVWXV02.0	5
46.4		9	8DVWXV02.0	5
31.9		6	6DVWXV02.0	7
31.7		7	7DVWXV02.0	7
28.5		6	6DVWXV03.0	5

29.9		6	6 DVWXJ02.	5
26.4		5	5 DVWXJ02.	5
29.6		6	6 DVWXJ02.	5
23.3		6	5 DADXT03.(	5
25		4	4 DVWXT03.	5
28.2		5	5 DVWXT03.	5

Signal 10 Pull #507 (for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm



DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DADXV02.0 5

DADXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5



Highway Miles Per Gallon (Hwy MPG)	City Miles Per Gallon (City MPG)	Combined Miles Per Gallon (Comb MPG)	CO2 (City)	CO2 (Hwy)	CO2 (Comb)	CO2- Volu (City)	CO2- Volu (Hwy)	CO2- City U
3100		340	244	297		259.8		
	400	432	319	381		333		
	400	442	296	376		350		
	400	442	316	385		325		
600		373	304	342		293.8		
	400	437	297	374		345.7		
600		397	276	343		320.4		
600		373	304	342		293.8		
	400	437	297	374		345.7		
	400	437	297	374		345.7		
600		397	276	343		320.4		
1350		360	272	320		282		
	400	437	297	374		345.7		
	1400	482	326	412		383.5		
	1900	498	321	418		393.5		
	1900	498	321	418		393.5		
	1900	515	313	424		409.5		
	1900	498	321	418		393.5		
	3400	554	345	460		447.5		
	6150	675	430	565		559		
	900	444	333	394		352		
	900	450	314	389		358		
600		369	298	337		380		
	1400	541	369	464		446		
	4150	573	412	500		460.9		
	4150	562	379	480		466		
	4150	558	398	486		463		
	1900	488	321	413		396		
	2650	441	355	402		443		
	1900	488	321	413		396		
	2650	441	355	402		443		
	1900	500	341	429		401		
	2650	530	330	440		427.3		
	2650	530	330	440		427.3		
	3400	580	347	475		468		
600		394	284	345		312.2		
600		394	284	345		312.2		
	2650	499	350	432		419		
	8650	787	474	646		649		
	4150	590	364	488		466		
	8650	768	469	633		639		
	5150	638	370	517		510		
	8650	787	474	646		649		
	8650	768	469	634		639		
	10400	840	501	688		690		

	16900	1050	599	847	885
	10400	836	481	676	705
	12150	902	547	742	771
	6150	657	447	562	552
	7400	734	511	633	635
	6150	660	446	564	556
	8650	768	452	625	681
2600		354	262	313	272
100		401	291	351	334.3
2600		365	250	314	281.3
2400		430	298	371	350.8
850		396	310	358	323.7
850		408	289	354	335.2
	400	421	310	371	332
2600		365	250	314	281.3
	400	430	298	371	350.8
100		418	329	378	335.4
100		403	283	349	327.2
100		425	279	360	346.3
	1900	507	334	429	419
	2650	523	351	446	434
100		405	257	338	321
3100		340	244	297	259.8
3100		342	243	298	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
	1400	460	330	402	372
1100		379	271	331	295.1
100		416	287	358	340.4
3100		340	244	297	259.8
1100		372	280	331	300.9
850		381	299	344	315
2100		361	262	316	307
3100		342	243	298	261.7
600		403	272	344	333.9
1350		374	286	334	315.6
1350		388	271	335	336.4
2850		352	258	310	270
3100		342	243	298	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
3100		331	240	290	268
3350		330	239	289	266
850		401	289	351	328.2
1350		391	275	339	339.6
	900	449	319	390	372

900	430	342	390	339.6
1900	484	336	417	407
900	435	344	394	343.6
900	517	351	442	422
3400	520	391	462	416
1900	447	372	413	354

Model	City CO2 (g/km)	City Fuel (l/100km)	City Emissions (g/km)	City CO2 (g/km)	City Fuel (l/100km)
171.2	219.9	339.9	244.5	297	
232	287.6	431.8	318.9	381	
220	291.5	442.5	295.6	376.4	
239	286.3	442	316	385.3	
199.8	251.5	373.3	303.6	341.9	
218.7	288.6	436.9	296.8	373.9	
202.1	267.2	397.1	276.4	342.8	
199.8	251.5	373.3	303.6	341.9	
218.7	288.6	436.9	296.8	373.9	
218.7	288.6	436.9	296.8	373.9	
202.1	267.2	397.1	276.4	342.8	
189	240.2	360	272	320.4	
218.7	288.6	436.9	296.8	373.9	
233	315.8	481.7	326	411.6	
238.7	323.8	498	320.9	418.3	
238.7	323.9	498	320.9	418.4	
232	329.6	515.1	313.1	424.2	
238.7	323.9	498	320.9	418.4	
262	364	554.1	344.7	459.9	
346	463.2	675	430	564.8	
238	300.7	444	333	394	
230	300.4	449.6	314.3	388.7	
223	309.4	368.9	298.5	337.2	
260	362.3	541	369	463.6	
296.5	386.9	573.1	411.5	500.4	
296	389.5	562.3	379.3	480	
307	392.8	558	398	486	
248	329.4	488	321	412.8	
266	363.4	440.6	355	402.1	
248	329.4	488	321	412.8	
266	363.4	440.6	355	402.1	
256	335.8	500.4	340.8	428.6	
251.6	348.2	530.4	329.7	440.1	
251.6	348.2	530.4	329.7	440.1	
267	377.6	580.3	347.3	475.4	
209.9	266.2	394.5	284.4	345	
209.9	266.2	394.5	284.4	345	
259	347	498.9	350.4	432.1	
361	519.4	787	474	646.2	
265	375.6	590	364	488.3	
359	513	768	469	633.4	
288	410.1	638	370	517.4	
361	519.4	787	474	646.2	
359	513	768	469	634	
408	563.1	840.4	501	687.7	

495	709.5	1050.2	598.8	847.1
353	546.6	836	481	676.3
418	612.2	902	547	742.2
349	460.6	657	447	562.5
370	515.8	734	511	633
348	462.4	660	446	563.7
391	550.5	768	452	625
184	232.4	354.3	261.8	312.7
211.2	278.9	401	290.6	351.3
175.3	233.6	365.3	250.1	313.5
214.6	289.5	430.3	298	370.8
227.6	280.5	396.3	310.3	358.2
207.2	277.6	407.6	288.8	354.1
220.9	282	421	310	371
175.3	233.6	365.3	250.1	313.5
214.6	289.5	430.3	298	370.8
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
202.5	281.6	425.2	279.3	359.5
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	404.7	256.6	338.1
171.2	219.9	339.9	244.5	297
170	220.5	342.1	242.9	297.5
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
240	312.6	459.5	330.5	401.5
203.2	253.7	379.2	271.3	330.6
215.5	284.2	415.9	287	357.9
171.2	219.9	339.9	244.5	297
196.7	254	372	280.4	330.8
214	269.6	381.3	298.8	344.2
192	255.2	360.5	262	316.2
170	220.5	342.1	242.9	297.5
197.2	272.4	403.3	271.8	344.1
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
181	230	351.9	257.7	309.5
170	220.5	342.1	242.9	297.5
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.7
206.8	279.8	391.3	275	339
238	311.7	449	319	390.5

244.4	296.8	429.9	341.3	390
248	335.5	484	336	417.4
246	299.7	434.6	343.5	394
248	343.7	517	351	442.3
281	355.2	520.1	390.6	461.8
267	314.8	446.9	371.8	413.1



City	EPA_Comb Vol	Cons 10 Miles	Distance	Label	EPA_FUEL	EPA_GHG	EPA_AMT	EPA_INCR
N			2.9					2.9
N			4.2					4.2
N			4.2					4.2
N			4.2					4.2
N			3.8					3.8
N			4.2					4.2
N			3.8					3.8
N			3.8					3.8
N			4.2					4.2
N			4.2					4.2
N			3.8					3.8
N			3.6					3.6
N			4.2					4.2
N			4.5					4.5
N			4.8					4.8
N			4.8					4.8
N			4.8					4.8
N			4.8					4.8
N			5.3					5.3
N			6.2					6.2
N			4.3					4.3
N			4.3					4.3
N			3.8					3.8
N			4.5					4.5
N			5.6					5.6
N			5.6					5.6
N			5.6					5.6
N			4.8					4.8
N			5					5
N			4.8					4.8
N			5					5
N			4.8					4.8
N			5					5
N			5					5
N			5.3					5.3
N			3.8					3.8
N			3.8					3.8
N			5					5
N			7.1					7.1
N			5.6					5.6
N			7.1					7.1
N			5.9					5.9
N			7.1					7.1
N			7.1					7.1
N			7.7					7.7

N	10	10
N	7.7	7.7
N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	2.9	2.9
N	3.7	3.7
N	4	4
N	3.6	3.6
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	3.8	3.8
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3

N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8







UNRIEPA_UNRIEPA_ADJ_EPA_PHEVLabel Submitter
UNRIEPA_UNRIEPA_ADJ_EPA_PHEVLabel Submitter

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Mr. Richard E Thomas Jr.  
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**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Fri 8/17/2012 7:06:21 PM  
**Subject:** re: 2013 FE Guide - Errors in EPA's data base as of Aug 15, 2012; last day to make corrections for the Printed Guide is Aug 29, 2012  
VW Group 2013 FE Guide-all rel dates-no-sales-8-15-2012.xlsx

Richard

I'll send you the data in Verify as of Aug 15---even though I sent you an updated dataset yesterday. The Aug 15 dataset was double checked more thoroughly, includes the possible error regarding Stop-Start vehicles, etc. Thanks for your help correcting errors over the past month or so.

Attached are the data in Verify as of Aug 15, 2012. Please make any needed corrections (including corrections to the Verify Release 10 fields) as soon as possible. The last day to make corrections for the Printed Guide is August 29, 2012. Labels with pea green fill in the first few columns were not sent to DOE on Aug 16, 2012 for posting on the web. In the future, labels with pea green or dark green fill in the first few columns will not be sent to DOE for posting on the web. (Pea green fill means the error occurred in one of the Verify Release 9 fields. Dark green fill means an error occurred in one of the new Verify Release 10 fields.)

As you begin to correct the errors, please let me know if you need an up-to-date query of the data in Verify--e.g. next week or so and I'll be glad to email it to you.

Placeholder vehicles for the 2013 Printed Guide: As a reminder, please email me an excel spreadsheet with any 2013 alternative fuel/new technology placeholder vehicles (2013 vehicles for which the fuel economy will not be available by August 29, 2012)---including diesel vehicles, CNG vehicles, Electric vehicles, conventional hybrid vehicles, plug-in hybrid vehicles, FFVs and fuel cell vehicles. For more information about sending us your placeholder vehicles, please see Enclosure 2, Section 3 of the recent EPA guidance letter which was sent out on Monday (CD-12-10 Subject: Fuel Economy Label Information for 2013 Model Year). I need a spreadsheet with your placeholder vehicles by August 29, 2012.

I'll include my (edited) notes from previous emails for your convenience.

As usual, thanks for your help.

Dave

Edited notes from my previous email messages:

1. Correcting Errors: As usual, the errors and my comments are shown in the first two columns of the spreadsheet. Green fill in the first few columns means our macro detected an error. Labels with errors will not be included in the 2013 Printed Guide until the errors are corrected.
2. Voluntarily lowered Fuel Economy: For labels which you voluntarily lowered the mpg of your vehicles, EPA regulations require that you also increase the CO2 accordingly. Calculating the voluntarily increased combined CO2 value is fairly easy (knowing the unrounded adjusted mpg value, the rounded, voluntarily

lowered mpg value, and the unrounded adjusted CO2 value). Our macro will check the voluntarily increased city, highway and combined CO2 value for errors using the formula in the following example:

Given:

unrounded adjusted combined mpg = 21.6949 mpg

unrounded adjusted combined CO2 = 408.4 gpm

Voluntarily lowered Label mpg = 20 mpg

Then: Voluntarily increased CO2 = (21.6949 mpg x 408.4 gpm) / 20 mpg = 443.01 gpm; which rounds to 443 gpm CO2

3. Errors in Combined Adjusted Fuel Consumption: As indicated in a previous email to most manufacturers, I'm finding a lot of errors in the new field "Adjusted Combined Model Type Fuel Consumption." Some manufacturers are entering fuel economy values (mpg) values instead of fuel consumption (gallons per 100 miles). Some are incorrectly calculating fuel consumption using the (incorrect) unrounded adjusted combined mpg value instead of the correct rounded adjusted combined mpg value (as listed prominently on the 2013 labels (window stickers)---as explained in more detail in Item 4, below.

If there are errors in the fuel consumption value listed on the actual labels (window stickers) of your vehicles, please correct the labels as soon as practicable. Call or email me if you have questions about the fuel consumption values shown on the actual labels (window stickers) of your vehicles.

4. Mistake in the EPA Regulations for Calculating Fuel Consumption (600.311-12(c): For conventional vehicles (not EVs or PHEVs), there is a mistake in the current regulations at 600.311-12(c) which EPA proposed to correct in the 2017 greenhouse gas proposal (page 76FR 75392, Dec 1, 2011).

The current (incorrect) regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The unrounded value for combined fuel economy from 600.210-12(c)."

The (correct) proposed regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The value for combined fuel economy from 600.210-12(c) rounded to the nearest whole mpg." Please use the voluntarily lowered combined adjusted MPG value, if applicable.

We are making this change for several reasons, e.g. so that customers will be able to accurately calculate the fuel consumption of their vehicle from the information displayed on the label; so that two vehicles with the same combined fuel economy mpg values won't have different fuel consumption values displayed on the label, etc. One benefit to manufacturers and EPA is that this correction will result in fewer questions from consumers about how the fuel consumption values are calculated.

5. Request to update any 2013 FE Labels submitted to Verify before May 11, 2012: EPA and DOE are in the process of updating the information displayed at [www.fueleconomy.gov](http://www.fueleconomy.gov) to show the same type of information which is displayed on the 2013 window stickers, e.g. Fuel Economy (1-10) rating, Greenhouse Gas (1-10) Rating, Smog (1-10) rating, adjusted combined fuel consumption (values, adjusted combined CO2 (grams/mile) values, amount saved (or spent) over 5 years, battery charging time for EVs & PHEVs, etc. We anticipate that the website will be updated within the next couple of months. In addition, the Greenhouse Gas 1-10 score will be shown in the 2013 Printed Guide. For these reasons, we are requesting that manufacturers update any labels which were entered into EPA's Verify data base prior to May 11, 2012 (Verify Release 9 labels which don't contain this information).

EPA.com	VERIFY cc	Model Yr (Mfr Name	Division (Mfr	Carline	Verify Mfr Index (Mfr	Eng Displ # Cyl	
		2013 Audi	Audi	A3	ADX	59	2.0 4
		2013 Audi	Audi	A3	ADX	73	2.0 4
		2013 Audi	Audi	A3	ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013 Audi	Audi	A4	ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	39	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013 Audi	Audi	A6	ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro	ADX	76	3.0 6
		2013 Audi	Audi	A8	ADX	128	3.0 6
		2013 Audi	Audi	A8	ADX	98	4.0 8
		2013 Audi	Audi	A8L	ADX	129	3.0 6
		2013 Audi	Audi	A8L	ADX	97	4.0 8
		2013 Audi	Audi	A8L	ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013 Audi	Audi	Q5	ADX	91	2.0 4
		2013 Audi	Audi	Q7	ADX	61	3.0 6
		2013 Audi	Audi	Q7	ADX	53	3.0 6
		2013 Audi	Audi	RS5	ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
		2013 Audi	Audi	S4	ADX	42	3.0 6
		2013 Audi	Audi	S4	ADX	45	3.0 6
		2013 Audi	Audi	S5	ADX	43	3.0 6
		2013 Audi	Audi	S5	ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013 Audi	Audi	S6	ADX	48	4.0 8
		2013 Audi	Audi	S7	ADX	47	4.0 8
		2013 Audi	Audi	S8	ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe	ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013 Audi	Audi	TT RS Coup	ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental	BEX	110	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX	108	4.0 8
		2013 Bentley	Bentley Motors	Continental	BEX	113	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX	107	4.0 8
		2013 Bentley	Bentley Motors	Continental	BEX	111	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX	112	6.0 12
		2013 Bugatti	Bugatti	Veyron	BGT	88	8.0 16
		2013 Lamborghini	Lamborghini	Aventador	NLX	92	6.5 12

	2013	Lamborghini	Lamborghini	Aventador NLX	93	6.5	12
	2013	Lamborghini	Lamborghini	Gallardo CNLX	30	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo CNLX	32	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo S NLX	31	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo S NLX	33	5.2	10
Diesel;	2013	Volkswage	Volkswage	BEETLE VWX	94	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	19	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	84	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	89	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	17	2.5	5
	2013	Volkswage	Volkswage	BEETLE VWX	27	2.5	5
	2013	Volkswage	Volkswage	BEETLE COVWX	20	2.0	4
	2013	Volkswage	Volkswage	BEETLE CVWX	85	2.0	4
	2013	Volkswage	Volkswage	BEETLE COVWX	90	2.0	4
	2013	Volkswage	Volkswage	BEETLE COVWX	18	2.5	5
	2013	Volkswage	Volkswage	CC VWX	1	2.0	4
	2013	Volkswage	Volkswage	CC VWX	4	2.0	4
	2013	Volkswage	Volkswage	CC VWX	2	3.6	6
	2013	Volkswage	Volkswage	CC 4MOTIC VWX	3	3.6	6
	2013	Volkswage	Volkswage	Eos VWX	21	2.0	4
	2013	Volkswage	Volkswage	GOLF VWX	72	2.0	4
	2013	Volkswage	Volkswage	GOLF VWX	81	2.0	4
	2013	Volkswage	Volkswage	GOLF VWX	16	2.5	5
	2013	Volkswage	Volkswage	GOLF VWX	26	2.5	5
	2013	Volkswage	Volkswage	Golf R VWX	57	2.0	4
	2013	Volkswage	Volkswage	GTI VWX	22	2.0	4
	2013	Volkswage	Volkswage	GTI VWX	23	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	50	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	71	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	86	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	87	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	51	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	80	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	15	2.5	5
	2013	Volkswage	Volkswage	Jetta VWX	25	2.5	5
Diesel;	2013	Volkswage	Volkswage	JETTA SPO VWX	74	2.0	4
	2013	Volkswage	Volkswage	JETTA SP VWX	79	2.0	4
	2013	Volkswage	Volkswage	JETTA SPO VWX	14	2.5	5
	2013	Volkswage	Volkswage	JETTA SPO VWX	24	2.5	5
Diesel;	2013	Volkswage	Volkswage	Passat VWX	62	2.0	4
Diesel;	2013	Volkswage	Volkswage	Passat VWX	64	2.0	4
	2013	Volkswage	Volkswage	Passat VWX	83	2.5	5
	2013	Volkswage	Volkswage	Passat VWX	82	2.5	5
	2013	Volkswage	Volkswage	Passat VWX	63	3.6	6
	2013	Volkswage	Volkswage	TIGUAN VWX	68	2.0	4
	2013	Volkswage	Volkswage	TIGUAN VWX	56	2.0	4

Temporary	2013 Volkswagen	Volkswagen	TIGUAN 4I VWX	55	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	TOUAREG VWX	54	3.0	6
Temporary	2013 Volkswagen	Volkswagen	TOUAREG VWX	78	3.6	6
Hybrid;	2013 Volkswagen	Volkswagen	Touareg H VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	21	28	24				26.6	38.2	30.8102
Auto(AM-S	30	42	34				39.0935	59.3437	46.1856
Manual(M	21	30	24				25.3	40.3	30.3902
Auto(AM-S	21	28	24				27.2	37.1	30.9119
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	16	26	20				21.5575	37.3745	27.4556
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8)	16	26	20				21.5575	37.3745	27.4556
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S	16	23	18				19.1	30	22.8332
Auto(AM-S	16	22	18				19.2	28.9	22.6159
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				20	33.4	24.4063
Auto(AM-S	18	28	21				22.4	35.8	26.9372
Manual(M	17	26	20				20	33.4	24.4063
Auto(AM-S	18	26	21				22.1	34.7	26.4165
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(AM-S	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S	22	31	26				28.4068	42.2579	33.3217
Manual(M	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(AM-S	8	15	10				10	17.9	12.4782
Auto(AM-S	11	18	13				12.6	25.2	16.2581

Auto(AM-S	10	16	12	11.5	21.2	14.4817
Auto(AM-S	13	20	16	16.1	25.4	19.276
Manual(M€	12	20	15	14	24	17.2308
Auto(AM-S	13	20	16	16	25.4	19.197
Manual(M€	12	20	14	13	22.6	16.0722
Auto(AM-S	29	39	32	37.3	55.3	43.7011
Auto(AM-S	22	30	25	26.5	42.0656	31.7942
Manual(M€	28	41	32	36.066	57.9978	43.4617
Manual(M€	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M.	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
Manual(M€	28	41	32	36.066	57.9978	43.4617
Manual(M.	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M.	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Manual(M€	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M.	23	33	26	26.3044	44.5088	32.2378
Manual(M€	19	27	22	23.9	37.1	28.456
Auto(AM-S	24	33	27	29.9333	43.5096	34.8229
Manual(M.	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M.	24	34	28	28.8	46.2	34.6771
Manual(M.	22	33	26	26.5556	44.9945	32.56
Manual(M€	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M.	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	29	39	33	37.6	56.2	44.1798
Manual(M€	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M.	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M.	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M.	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M€	18	26	21	21.7	35.8	26.3745



calculate 343; Please revise Verify as needed.

Auto(S8)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Highway	Urban	Comb	Unr	Guzzler?	Air Aspir	Air Aspir	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbochar	AMS	Automate			6
29.8946	41.5209	34.2046			TC	Turbochar	AMS	Automated			6
20.8146	29.9953	24.1394			TC	Turbochar	M	Manual			6
20.891	28.1035	23.6187			TC	Turbochar	AMS	Automate			6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual			6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual			6
24.5044	32.5529	27.5721			TC	Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
18.3949	27.2332	21.5408			SC	Superchar	SA	Semi-Auto			8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto			8
as performed with the stop-start feature enabled). Please revise/clarify as needed.	17.4088	27.5484	21.1758		SC	Superchar	SA	Semi-Auto			8
as performed with the stop-start feature enabled). Please revise/clarify as needed.	17.2616	28.4347	20.9695		TC	Turbochar	SA	Semi-Auto			8
as performed with the stop-start feature enabled). Please revise/clarify as needed.	17.4088	27.5484	21.1758		SC	Superchar	SA	Semi-Auto			8
16.0273	25.8053	19.3219			TC	Turbochar	SA	Semi-Auto			8
13.1387	20.6025	15.6978	G		NA	Naturally	SA	Semi-Auto			8
19.9584	26.6824	22.5112			TC	Turbochar	SA	Semi-Auto			8
19.7289	28.2351	22.823			TC	Turbochar	SA	Semi-Auto			8
15.522	21.5458	17.7559			SC	Superchar	SA	Semi-Auto			8
18.74	27.62	21.9099			TC	Turbochar	SA	Semi-Auto			8
15.7409	23.3075	18.4339			NA	Naturally	AMS	Automate			7
15.8793	22.1836	18.2078			NA	Naturally	AMS	Automate			7
18.117	27.558	21.419			SC	Superchar	AMS	Automate			7
17.0438	26.023	20.1767			SC	Superchar	M	Manual			6
18.117	27.558	21.419			SC	Superchar	AMS	Automate			7
17.0438	26.023	20.1767			SC	Superchar	M	Manual			6
17.6699	25.953	20.6333			SC	Superchar	AMS	Automate			7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automate			7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automate			7
15.2801	25.5632	18.6574			TC	Turbochar	SA	Semi-Auto			8
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automate			6
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automate			6
17.751	25.2021	20.4751			TC	Turbochar	M	Manual			6
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto			6
15.0109	24.4645	18.1706			TC	Turbochar	SA	Semi-Auto			8
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto			6
14.0639	23.9773	17.2766	G		TC	Turbochar	SA	Semi-Auto			8
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto			6
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto			6
8.4232	14.7698	10.4424	G		TC	Turbochar	AMS	Automate			7
10.6055	18.4729	13.1199	G		NA	Naturally	AAMS	Automated			7

9.7957	16.2453	11.9264G	NA	Naturally #AMS	Automated	7
13.4655	19.7573	15.718G	NA	Naturally #AMS	Automated	6
12.0883	19.9831	14.7021G	NA	Naturally #M	Manual	6
13.3954	19.7741	15.6701G	NA	Naturally #AMS	Automated	6
11.5388	19.5451	14.1465G	NA	Naturally #M	Manual	6
28.6469	38.87	32.4925	TC	TurbochargedAMS	Automated	6
22.0202	29.5574	24.8746	TC	TurbochargedAMS	Automated	6
27.8088	40.6616	32.4203	TC	TurbochargedM	Manual	6
20.5408	29.7034	23.8517	TC	TurbochargedM	Manual	6
22.2864	28.5683	24.7338	NA	Naturally #SA	Semi-Auto	6
21.7201	30.6767	25.0054	NA	Naturally #M	Manual	5
21.1383	28.6751	23.9738	TC	TurbochargedAMS	Automated	6
27.8088	40.6616	32.4203	TC	TurbochargedM	Manual	6
20.5408	29.7034	23.8517	TC	TurbochargedM	Manual	6
21.2302	26.9749	23.4804	NA	Naturally #SA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	TurbochargedAMS	Automated	6
20.8232	31.7255	24.6324	TC	TurbochargedM	Manual	6
17.4935	26.5716	20.6716	NA	Naturally #SA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally #SA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	TurbochargedAMS	Automated	6
29.8946	41.5209	34.2046	TC	TurbochargedAMS	Automated	6
29.6183	41.8508	34.104	TC	TurbochargedM	Manual	6
23.6446	31.0458	26.486	NA	Naturally #SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally #M	Manual	5
19.278	26.8882	22.0917	TC	TurbochargedM	Manual	6
24.2237	32.5108	27.3624	TC	TurbochargedAMS	Automated	6
21.2839	30.8324	24.7304	TC	TurbochargedM	Manual	6
23.7854	31.6043	26.7652	TC	TurbochargedAMS	Automated	6
29.8946	41.5209	34.2046	TC	TurbochargedAMS	Automated	6
23.1009	29.1554	25.4822	NA	Naturally #SA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally #M	Manual	5
21.8931	32.6043	25.6912	TC	TurbochargedM	Manual	6
29.6183	41.8508	34.104	TC	TurbochargedM	Manual	6
23.6446	31.0458	26.486	NA	Naturally #SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally #M	Manual	5
28.8556	39.4682	32.8278	TC	TurbochargedAMS	Automated	6
29.6183	41.8508	34.104	TC	TurbochargedM	Manual	6
23.6446	31.0458	26.486	NA	Naturally #SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally #M	Manual	5
30.4633	40.2057	34.1916	TC	TurbochargedAMS	Automated	6
30.8024	42.6219	35.1943	TC	TurbochargedM	Manual	6
22.1078	30.6611	25.2814	NA	Naturally #SA	Semi-Auto	6
21.8993	32.1378	25.5642	NA	Naturally #M	Manual	5
19.7174	27.8048	22.6868	NA	Naturally #AMS	Automated	6
20.6233	26.0617	22.7606	TC	TurbochargedSA	Semi-Auto	6
18.1488	26.2617	21.0791	TC	TurbochargedM	Manual	6

20.402	25.8545	22.5412	TC	TurbocharçSA	Semi-Auto	6
19.649	28.9961	22.9829	TC	TurbocharçSA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally ASA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	SupercharçSA	Semi-Auto	8

Lockup T	Trans C	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Automated Manual with paddles)	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	2-Wheel DDVW XV02.0U5N			5	DU	Diesel, ultr	
N	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDVW XV06.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XT03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDAD XT03.03UG			5	DU	Diesel, ultr	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDAD XV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel IDAD XV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDBGTV08.0		10		GPR	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDNL XV06.0		10		GPR	Gasoline (I	

Automated Manual with paddles)	All Wheel	IDNLXV06.5	10		GPR	Gasoline (F
Automated Manual with paddles)	All Wheel	IDAD XV05.1	10		GP	Gasoline (F
N N A	All Wheel	IDAD XV05.1	10		GP	Gasoline (I
Automated Manual with paddles)	All Wheel	IDAD XV05.1	10		GP	Gasoline (F
N N A	All Wheel	IDAD XV05.1	10		GP	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (I
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (I
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
Y N F	2-Wheel	DDVWXV03.0	10		GP	Gasoline (F
Y N A	All Wheel	IDVWXV03.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N A	All Wheel	IDAD XV02.0	10		GP	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDAD XV02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDAD XV02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U4S		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXV02.0U4S		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV03.0	10		GP	Gasoline (F
Y N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (I
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (I

Y	N	A	All Wheel IDVWXJ02.	10		GP	Gasoline (I
Y	N	A	All Wheel IDADXT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel IDVWXT03	10		GP	Gasoline (I
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F

2017-FFP 004523



[illegible]

m Unleaded Recommended)	Truck
MPG (15 miles per gallon)	Truck
m Unleaded Recommended)	Truck
MPG (15 miles per gallon)	Truck

Annual Fuel Economy	EPA Calculation	Comment	City2 FE (l/100mi)	Hwy2 FE (l/100mi)	Low'd City2 FE (l/100mi)	Low'd Hwy2 FE (l/100mi)	Low'd City2 FE (l/100mi)	Low'd Hwy2 FE (l/100mi)	City2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C							
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation							
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values							
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v							
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unroun							
2400	2400	added A6 quattro configuartion data to the base level, corrected gas guzzler MPG valuwe and							
2200	2200								
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th							
2400	2400	added A6 quattro configuartion data to the base level; corrected gas guzzler MPG valuwe and							
2400	2400	added A6 quattro configuartion data to the base level; corrected gas guzzler MPG valuwe and							
2200	2200								
2050	2050	corrected forward speeds to 8, for this CVT trans							
2400	2400	corrected gas guzzler MPG valuwe and gallons per 100 value...these values were switched							
2600	2600								
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th							
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value							
2700	2700								
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrnd city CO2 value corrected							
3000	3000								
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con							
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c							
2500	2500	corrected unadj unrounded highway and conbined values							
3150	3150	CO2 corrections, again Aug 14th							
2600	2600	CO2 corrections, additonal fuel costs in saving field, corrected Aug 14th							
3150	3150	CO2 corrections							
3150	3150	corrected city CO2 value, typo							
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una							
2700	2700	corrected city unadj unrounded CO2 , Aug 14th							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una							
2700	2700	corrected unadj and adj CO2 values, Aug 14th							
2850	2850	CO2 corrections							
2850	2850	CO2 corrections							
3000	3000								
2200	2200	CO2 corrections, Aug 14th correction							
2200	2200	CO2 corrections, Aug 14th							
2850	2850								
4050	4050	corrected i8	13	10				9.5	
3150	3150								
4050	4050	correct adj8	14	10				10.3	
3350	3350								
4050	4050	corrected i8	13	10				9.5	
4050	4050	8	14	10				10.3	
5700	5700	corrected lock out to "yes" and AMS.							
4400	4400	lock up to YES., CO2 corrections Aug 14							

4750 4750 adjusted release date, lock up to YES., CO2 corrections Aug 14th  
 3550 3550 corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th  
 3800 3800  
 3550 3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
 4050 4050  
 1800 1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
 2300 2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 corrected CO2 values  
 2150 2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
 2150 2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
 2400 2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 CO2 corrections, fuel spending corrected to \$400  
 2300 2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
 2300 2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
 2300 2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
 2700 2700 update after Verify release 10  
 2850 2850 UPDATE after Verify release 10  
 2300 2300 CO2 corrections  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 comb correction  
 2600 2600 CO2 corrections  
 2100 2100 CO2 corrections  
 2300 2300 early label, upate after Verify release 10  
 2100 2100 corrected unadjusted unrounded CO2 highway and conbined values and combined adjusted w  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation  
 2150 2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
 1900 1900 FE and GHG ratings corrected to 7  
 2200 2200 CO2 corrections  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1750 1750 CO2 corrections; inhouse dervied 5-cycle formula corrected Aug 15th  
 1700 1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1700 1700  
 1650 1650  
 2150 2150 CO2 corrections  
 2050 2050 CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
 2500 2500 CO2 correction  
 2500 2500 corrected CO2 values  
 2700 2700 CO2 corrections

2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections
2500	2500 CO2 corrections
3000	3000
2700	2700 CO2 corrections

	Hwy2 Unit	Comb2 Unit	Hwy2 Unit	Comb2 Unit	Range2 - Fuel2 Usr	Fuel2 Usr	Fuel2 Unit	Fuel2 Unit
02								

ded CO2 value again, second time Aug 14th  
gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
gallons per 100 value...these values were switched

sumption to 6.2 per ASTM rounding procedure  
ity and highway CO2 values

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E)MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E)MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E)MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E)MPG	miles per g

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th

roup

nrounded highway and combined CO2 values

o 29 MPG

ycle formular corrected Aug 15th

ed MPG value

nd corresponding 5-cycle values

cted calculated values

hole CO2 value





Relative Fuel	CO2	CO2	CO2	CO2	Fuel2 EPA	Descripto	Intake Val	Exhaust V	Carline CI	Carline CI
4612 Ann City	CO2	CO2	CO2	CO2	Fuel2 EPA	Descripto	Intake Val	Exhaust V	Carline CI	Carline CI
						SIDI;	2	27	Small Stati	
							2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI; Unde	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI; Unde	2	26	Large Cars	
						SIDI;	2	26	Large Cars	
						SIDI;	2	26	Large Cars	
						SIDI;	2	27	Small Stati	
						SIDI;	2	231	Small SUV 4WD	
						SIDI;	2	233	Standard SUV 4W	
							2	233	Standard SUV 4W	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	23	Subcompa	
						SIDI;	2	21	Two Seate	
4650	794	469	648	4650		SIDI;	2	23	Subcompa	
						FFV;	2	25	Midsize Ca	
4650	794	469	648	4650		SIDI;	2	24	Compact C	
						FFV;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
4650	794	469	648	4650		FFV;	2	23	Subcompa	
4650	794	469	648	4650		FFV;	2	23	Subcompa	
							2	21	Two Seate	
							2	21	Two Seate	

	2	21	Two Seate
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seate
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	23	Subcompa
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	1	15	Midsize Ca
	1	15	Midsize Ca
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
SIDI;	2	25	Midsize Ca
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD

SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique LaLabel Rec	Relabel	Relabel D
car	Vehicle Specific 5-cycle	6/11/2012	11328	N	N
car	Derived 5-cycle label	6/22/2012	12150	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11302	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11487	N	N
car	Vehicle Specific 5-cycle	5/21/2012	12092	N	N
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N
car	Vehicle Specific 5-cycle	5/21/2012	12093	N	N
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N
car	Derived 5-cycle label	6/25/2012	10288	N	N
car	Vehicle Specific 5-cycle	6/21/2012	12101	N	N
car	Vehicle Specific 5-cycle	6/22/2012	12072	N	N
car	Vehicle Specific 5-cycle	6/22/2012	12071	N	N
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N
car	Derived 5-cycle label	4/26/2012	11490	N	N
D	Vehicle Specific 5-cycle	7/11/2012	11319	N	N
D	Derived 5-cycle label	6/11/2012	12103	N	N
car	Vehicle Specific 5-cycle	7/16/2012	12105	N	N
car	Vehicle Specific 5-cycle	6/18/2012	11510	N	N
car	Vehicle Specific 5-cycle	7/11/2012	10452	N	N
car	Vehicle Specific 5-cycle	5/21/2012	12106	N	N
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N
car	Vehicle Specific 5-cycle	5/21/2012	12108	N	N
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N
car	Vehicle Specific 5-cycle	5/21/2012	12111	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N
car	Vehicle Specific 5-cycle	8/21/2012	12122	N	N
car	Vehicle Specific 5-cycle	6/18/2012	12115	N	N
car	Vehicle Specific 5-cycle	6/18/2012	12113	N	N
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N
car	Vehicle Specific 5-cycle	3/30/2012	12116	N	N
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N
car	Vehicle Specific 5-cycle	3/30/2012	12119	N	N
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N
car	Vehicle Specific 5-cycle	3/30/2012	12117	N	N
car	Vehicle Specific 5-cycle	3/30/2012	10184	N	N
car	Vehicle Specific 5-cycle	7/12/2012	11087	N	N
car	Vehicle Specific 5-cycle	8/7/2012	12124	N	N

car	Vehicle Specific 5-cycle 6/14/2013	12126	N	N
car	Vehicle Specific 5-cycle 6/11/2012	12128	N	N
car	Vehicle Specific 5-cycle 6/20/2012	10237	N	N
car	Vehicle Specific 5-cycle 6/21/2012	12130	N	N
car	Vehicle Specific 5-cycle 6/20/2012	10238	N	N
car	Derived 5-cycle label 7/19/2012	12135	N	N
car	Vehicle Specific 5-cycle 7/30/2012	10187	N	N
car	Derived 5-cycle label 6/25/2012	12155	N	N
car	Vehicle Specific 5-cycle 7/12/2012	11525	N	N
car	Vehicle Specific 5-cycle 7/30/2012	10751	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11373	N	N
car	Derived 5-cycle label 7/30/2012	10277	N	N
car	Derived 5-cycle label 6/25/2012	12156	N	N
car	Vehicle Specific 5-cycle 7/12/2012	11526	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11287	N	N
car	Vehicle Specific 5-cycle 1/16/2012	10186	N	N
car	Vehicle Specific 5-cycle 1/25/2012	11044	N	N
car	Vehicle Specific 5-cycle 1/16/2012	10532	N	N
car	Vehicle Specific 5-cycle 1/16/2012	10534	N	N
car	Vehicle Specific 5-cycle 6/11/2012	11527	N	N
car	Derived 5-cycle label 6/22/2012	12149	N	N
car	Derived 5-cycle label 6/25/2012	12154	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11528	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11529	N	N
car	Vehicle Specific 5-cycle 6/11/2012	11530	N	N
car	Vehicle Specific 5-cycle 6/16/2012	11531	N	N
car	Vehicle Specific 5-cycle 7/30/2012	10531	N	N
car	Vehicle Specific 5-cycle 6/18/2012	11372	N	N
car	Derived 5-cycle label 6/22/2012	12148	N	N
car	Vehicle Specific 5-cycle 6/29/2012	11219	N	N
car	Vehicle Specific 5-cycle 6/29/2012	11300	N	N
car	Vehicle Specific 5-cycle 6/16/2012	11532	N	N
car	Derived 5-cycle label 6/25/2012	12153	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11533	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11535	N	N
cars	Derived 5-cycle label 6/25/2012	12151	N	N
cars	Derived 5-cycle label 6/25/2012	12152	N	N
cars	Vehicle Specific 5-cycle 7/30/2012	11534	N	N
cars	Vehicle Specific 5-cycle 7/30/2012	11536	N	N
car	Vehicle Specific 5-cycle 6/11/2012	10158	N	N
car	Vehicle Specific 5-cycle 6/18/2012	10163	N	N
car	Vehicle Specific 5-cycle 6/23/2012	11539	N	N
car	Vehicle Specific 5-cycle 6/23/2012	11547	N	N
car	Vehicle Specific 5-cycle 6/11/2012	11554	N	N
	Derived 5-cycle label 6/18/2012	11556	N	N
	Vehicle Specific 5-cycle 6/11/2012	11558	N	N

	Derived 5-cycle label 6/11/2012	12157		N	N
D	Vehicle Specific 5-cycle 6/18/2012	11563		N	N
D	Derived 5-cycle label 6/25/2012	10319		N	N
D	Derived 5-cycle label 6/25/2012	11559		N	N

Suppressor	Police/Emission	Comments	Cyl Deact	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Energy St
N	N	Test Group	N	Y	CONTINUOUS				
N	N		N	N		N			
N	N	Test Group	N	Y	CONTINUOUS				
N	N	ENGINE CCN		Y	CONTINUOUS				
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N	Engine Coc	Y	Deactivated	Continuous	Y	Multi-lobe		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N	Engine Coc	Y	Deactivated	Continuous	Y	Multi-lobe		
N	N		N	Y	Intake and	N			
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N	Engine coc	N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS				
N	N		N	N		N			
N	N		N	Y	Continuously	N			
N	N		N	Y	Continuously	N			
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N	Engine Coc	Y	Deactivated	Continuous	Y	Multi-lobe		
N	N	Engine Coc	Y	Deactivated	Continuous	Y	Multi-lobe		
N	N	Engine Coc	Y	Deactivated	Continuous	Y	Multi-lobe		
N	N	ENGINE CCN		Y	CONTINUOUS				
N	N	ENGINE CCN		Y	CONTINUOUS				
N	N		N	Y	CONTINUOUS				
N	N	Continent	N	Y	INLET AND	N			
N	N	Engine Coc	Y	Deactivated	Continuous	Y	Multi-lobe		
N	N	Continent	N	Y	INLET AND	N			
N	N	Engine Coc	Y	Deactivated	Continuous	Y	Multi-lobe		
N	N	Continent	N	Y	INLET AND	N			
N	N	Continent	N	Y	INLET AN IN	N			
N	N	CHARGE A IN		Y	INLET AND	N			
N	N		Y	ELECTRO Y	HYDRAULIC	N			

N	N	Y	ELECTRONY	HYDRAULI(N
N	N	ENGINE CCN	Y	INLET ANDN
N	N	ENGINE CN	Y	INLET ANIN
N	N	ENGINE CCN	Y	INLET ANDN
N	N	ENGINE CN	Y	INLET ANIN
N	N	N	N	N
N	N	N	Y	position ofN
N	N	N	N	N
N	N	N	Y	position of N
N	N	N	Y	INLET COIN
N	N	N	Y	INLET CONN
N	N	N	Y	position ofN
N	N	N	N	N
N	N	N	Y	position ofN
N	N	N	Y	INLET CONN
N	N	N	Y	position ofN
N	N	N	Y	position ofN
N	N	N	Y	position ofN
N	N	N	Y	position ofN
N	N	N	Y	CONTINU(N
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONN
N	N	N	Y	INLET CONN
N	N	ENGINE CN	Y	CONTINU(N
N	N	ENGINE CCN	Y	CONTINUCN
N	N	ENGINE CCN	Y	CONTINUCN
N	N	N	Y	position ofN
N	N	N	N	N
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	position ofN
N	N	N	N	N
N	N	N	Y	INLET CONN
N	N	N	Y	INLET CONN
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONN
N	N	N	Y	INLET CONN
N	N	SCR EquipfN	N	N
N	N	SCR EquipfN	N	N
N	N	N	Y	INLET CONN
N	N	N	Y	INLET CONN
N	N	N	Y	Electronic N
N	N	N	Y	position of N
N	N	N	Y	position of N



N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	INTAKE / EN	
N	N	V6 CYLIND N	Y	MECHANICAL	Battery(s)

Device Design# Battery# Battery Ty Battery Ty Total Volt Batt Ener Batt Spec Batt Char Comment# Capacit

in the observation of the effects of the various design parameters on the efficiency of the injection process (including the effect of the size of the injection port) and the effect of the size of the injection port on the efficiency of the injection process. The results of the tests will be used to develop a design for the injection process that is both efficient and hydraulically adjusted.

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STMENT

MECHANICAL-HYDRAULIC

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MECHANICAL-HYDRAULIC

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MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

CONTINUOUSLY VVT  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
AL HYDRAULIC  
YDRAULIC  
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YDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted

controlled and hydraulically adjusted

RAULICALLY AND CONTROLLED ELECTRONICALLY

AMS	1 NiMH	288	6	21.5 On-Board
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es(2) bined gear at this loer, FGT grea ter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea ter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea ter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea ter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea ter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea ter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea ter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km



Other BRAKE PEBoth N

1Other

2017-FFP 004547



MFI	Multipoint	N	N	5W30 VW
GDI	Spark Ignit		N	10W60 VW
GDI	Spark Ignit		N	10W60 VW
GDI	Spark Ignit		N	10W60 VW
GDI	Spark Ignit		N	10W60 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
MFI	Multipoint/		N	10W40 / V
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W-40 VW
GDI	Spark Ignit		N	5W-40 VW
GDI	Spark Ignit		N	5W40 / VW
CRDI	Common FN		N	5W40
CRDI	Common FN		N	5W40
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
GDI	Spark IgnitN		N	5W40
GDI	Spark IgnitN		N	5W40
GDI	Spark IgnitN		N	5W40
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
MFI	Multipoint		N	5W40 VW
MFI	Multipoint		N	5W40 VW
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
CRDI	Common FN		N	5W40
CRDI	Common FN		N	5W40
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
CRDI	Common F		N	5W40 VW
CRDI	Common F		N	5W40 VW
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W40 VW

3 PHASE CI	34	GDI	Spark Ignit		N	5W40 VW
		CRDI	Common F		N	5W30 VW
		GDI	Spark Ignit		N	5W40 VW
		GDI	Spark IgnitN	N	N	5W40 VW

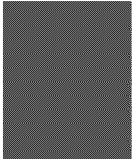
2017-FFP 004550

50700	No	Auto(AM-5Auto(AM-5
50500	No	Auto(AM-5Auto(AM-5
50500	No	Manual(MManual(MGallardo C
50500	No	Auto(AM-5Auto(AM-5
50500	No	Manual(MManual(MGallardo S
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N	No	Auto(S6) Auto(S6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-5Auto(AM-5
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N	No	Manual(MManual(MJetta Sport
N	No	Auto(S6) Auto(S6)
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N	No	Auto(AM-5Auto(AM-5
N	No	Auto(S6) Auto(S6) Jetta Base
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N	No	Manual(MManual(MJetta Sport
N	No	Auto(S6) Auto(S6)
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N	No	Manual(MManual(MJetta Sport
N	No	Auto(S6) Auto(S6)
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N	No	Auto(AM-5Auto(AM-5
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N	No	Auto(S6) Auto(S6) Tiguan for
N	No	Manual(MManual(M

N	No	Auto(S6)	Auto(S6)	
N	No	Auto(S8)	Auto(S8)	
N	No	Auto(S8)	Auto(S8)	
N	No	Auto(S8)	Auto(S8)	Touareg H

Model Year	Model	EPA Calculated Gas Mileage (mpg)	EPA Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
30.8			6	6 DAD XV02.0		7		
46.2			9	8 DVW XV02.0		5		
30.4			6	6 DAD XV02.0		7		
30.9			6	6 DAD XV02.0		5		
35.2			7	7 DAD XV02.0		5		
30.8			6	6 DAD XV02.0		5		
33.2			7	7 DAD XV02.0		5		
35.2			7	7 DAD XV02.0		5		
30.8			6	6 DAD XV02.0		5		
30.8			6	6 DAD XV02.0		5		
33.2			7	7 DAD XV02.0		5		
36.9			7	7 DAD XV02.0		5		
30.8			6	6 DAD XV02.0		5		
28.1			5	5 DAD XJ03.0		5		
27.5			5	5 DAD XJ03.0		5		
27.5			5	5 DAD XJ03.0		5		
27.1			5	5 DAD XV04.0		5		
27.5			5	5 DAD XJ03.0		5		
24.4			4	4 DAD XV04.0		5		
19.3			3	3 DVW XV06.0		5		
29.5			6	6 DAD XV02.0		5		
28.8			6	6 DAD XT02.0		5		
22.9			4	4 DAD XT03.0		5		
28.1			5	4 DAD XT03.0		5		
23			4	4 DAD XV04.0		5		
22.6			4	4 DAD XV04.0		5		
26.9			5	5 DAD XJ03.0		5		
23.5			5	5 DAD XJ03.0		5		
26.9			5	5 DAD XJ03.0		5		
23.5			5	5 DAD XJ03.0		5		
26.4			5	5 DAD XJ03.0		5		
25.5			5	5 DAD XV04.0		5		
25.5			5	5 DAD XV04.0		5		
23.6			4	4 DAD XV04.0		5		
33.3			7	7 DAD XV02.0		5		
33.3			7	7 DAD XV02.0		5		
25.6			5	5 DAD XV02.0		5		
17.2			2	2 DBEXV06.0		5		
23.6			4	4 DAD XV04.0		5		
17.4			2	2 DBEXV06.0		5		
21.8			4	4 DAD XV04.0		5		
17.2			2	2 DBEXV06.0		5		
17.4			2	2 DBEXV06.0		5		
12.6			1	1 DBGTV08.0		5		
16.4			2	2 DNL XV06.0		5		

14.5		1	1 DNLXV06.5	5
19.4		3	3 DAD XV05.1	5
17.4		3	3 DAD XV05.	5
19.3		3	3 DAD XV05.1	5
16.1		2	2 DAD XV05.	5
43.7		8	7 DVWXV02.	5
31.8		6	6 DVWXV02.	7
43.4		8	7 DVWXV02	5
30.7		6	6 DVWXV02	7
31.6		6	6 DVWXV02	7
31.9		6	6 DVWXV02.	7
31.5		6	6 DVWXV02.	7
43.4		8	7 DVWXV02	5
30.7		6	6 DVWXV02.	7
30.3		6	6 DVWXV02.	7
32.3		6	6 DVWXV02.	7
31.8		6	6 DVWXV02.	7
25.8		5	5 DVWXV03.	5
24.8		5	5 DVWXV03.	5
32.4		6	6 DVWXV02.	5
46.2		9	8 DVWXV02	5
46		9	8 DVWXV02	5
33.1		7	7 DVWXV02.	7
32.2		7	7 DVWXV02.	7
28.5		5	5 DAD XV02.	5
34.8		7	7 DAD XV02.0	7
31.2		6	6 DAD XV02.0	7
35		7	7 DVWXV02.	7
46.2		9	8 DVWXV02	5
32.9		6	6 DVWXV02.	5
34.7		7	7 DVWXV02.	5
32.6		7	7 DVWXV02.	7
46		9	8 DVWXV02	5
33.1		7	7 DVWXV02.	7
32.2		7	7 DVWXV02.	7
44.2		8	7 DVWXV02.	5
46		9	8 DVWXV02	5
33.1		7	7 DVWXV02.	7
32.2		7	7 DVWXV02.	7
44.6		9	8 DVWXV02.	5
46.4		9	8 DVWXV02.	5
31.9		6	6 DVWXV02.	7
31.7		7	7 DVWXV02.	7
28.5		6	6 DVWXV03.	5
29.9		6	6 DVWXJ02.	5
26.4		5	5 DVWXJ02.	5

29.6		6	6DVWXJ02.	5
23.3		6	5DADXT03.(	5
25		4	4DVWXT03	5
28.2		5	5DVWXT03.	5



Signal 10 Pull #507 (for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DADXV02.0 5

DADXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5



Highway Miles (City/Highway)	Highway Miles (City/Highway)	Highway Miles (City/Highway)	Highway Miles (City/Highway)	Highway Miles (City/Highway)	Highway Miles (City/Highway)
Highway Miles (City/Highway)	Highway Miles (City/Highway)	Highway Miles (City/Highway)	Highway Miles (City/Highway)	Highway Miles (City/Highway)	Highway Miles (City/Highway)
	400	432	319	381	333
3100	340	244	297		259.8
	400	442	296	376	350
	400	442	316	385	325
600		373	304	342	293.8
	400	437	297	374	345.7
600		397	276	343	320.4
600		373	304	342	293.8
	400	437	297	374	345.7
	400	437	297	374	345.7
600		397	276	343	320.4
1350		360	272	320	282
	400	437	297	374	345.7
	1400	482	326	412	383.5
	1900	498	321	418	393.5
	1900	498	321	418	393.5
	1900	515	313	424	409.5
	1900	498	321	418	393.5
	3400	554	345	460	447.5
	6150	675	430	565	559
	900	444	333	394	352
	900	450	314	389	358
	4150	573	412	500	460.9
	1400	541	369	464	446
	4150	562	379	480	466
	4150	558	398	486	463
	1900	488	321	413	396
	2650	441	355	402	443
	1900	488	321	413	396
	2650	441	355	402	443
	1900	500	341	429	401
	2650	530	330	440	427.3
	2650	530	330	440	427.3
	3400	580	347	475	468
600		394	284	345	312.2
600		394	284	345	312.2
	2650	499	350	432	419
	8650	787	474	646	649
	4150	590	364	488	466
	8650	768	469	633	639
	5150	638	370	517	510
	8650	787	474	646	649
	8650	768	469	634	639
	16900	1050	599	847	885
	10400	836	481	676	705

	12150	902	547	742	771
	6150	657	447	562	552
	7400	734	511	633	635
	6150	660	446	564	556
	8650	768	452	625	681
2600		354	262	313	272
100		401	291	351	334.3
2600		365	250	314	281.3
2400		430	298	371	350.8
850		396	310	358	323.7
850		408	289	354	335.2
	400	421	310	371	332
2600		365	250	314	281.3
	400	430	298	371	350.8
100		418	329	378	335.4
100		403	283	349	327.2
100		425	279	360	346.3
	1900	507	334	429	419
	2650	523	351	446	434
100		405	257	338	321
3100		340	244	297	259.8
3100		342	243	298	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
	1400	460	330	402	372
1100		379	271	331	295.1
100		416	287	358	340.4
1100		372	280	331	300.9
3100		340	244	297	259.8
850		381	299	344	315
2100		361	262	316	307
600		403	272	344	333.9
3100		342	243	298	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
2850		352	258	310	270
3100		342	243	298	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
3100		331	240	290	268
3350		330	239	289	266
850		401	289	351	328.2
1350		391	275	339	339.6
	900	449	319	390	372
	900	430	342	390	339.6
	1900	484	336	417	407

900	435	344	394	343.6
900	517	351	442	422
3400	520	391	462	416
1900	447	372	413	354

City	CO2-Hwy	CO2-City	CO2-Calculated	CO2-Hwy	CO2-Comb	CO2-PHEV 240V	Char 120V	Char PHEV	TotaCity PHEV
	232	287.6	431.8	318.9	381				
	171.2	219.9	339.9	244.5	297				
	220	291.5	442.5	295.6	376.4				
	239	286.3	442	316	385.3				
	199.8	251.5	373.3	303.6	341.9				
	218.7	288.6	436.9	296.8	373.9				
	202.1	267.2	397.1	276.4	342.8				
	199.8	251.5	373.3	303.6	341.9				
	218.7	288.6	436.9	296.8	373.9				
	218.7	288.6	436.9	296.8	373.9				
	202.1	267.2	397.1	276.4	342.8				
	189	240.2	360	272	320.4				
	218.7	288.6	436.9	296.8	373.9				
	233	315.8	481.7	326	411.6				
	238.7	323.8	498	320.9	418.3				
	238.7	323.9	498	320.9	418.4				
	232	329.6	515.1	313.1	424.2				
	238.7	323.9	498	320.9	418.4				
	262	364	554.1	344.7	459.9				
	346	463.2	675	430	564.8				
	238	300.7	444	333	394				
	230	300.4	449.6	314.3	388.7				
	296.5	386.9	573.1	411.5	500.4				
	260	362.3	541	369	463.6				
	296	389.5	562.3	379.3	480				
	307	392.8	558	398	486				
	248	329.4	488	321	412.8				
	266	363.4	440.6	355	402.1				
	248	329.4	488	321	412.8				
	266	363.4	440.6	355	402.1				
	256	335.8	500.4	340.8	428.6				
	251.6	348.2	530.4	329.7	440.1				
	251.6	348.2	530.4	329.7	440.1				
	267	377.6	580.3	347.3	475.4				
	209.9	266.2	394.5	284.4	345				
	209.9	266.2	394.5	284.4	345				
	259	347	498.9	350.4	432.1				
	361	519.4	787	474	646.2				
	265	375.6	590	364	488.3				
	359	513	768	469	633.4				
	288	410.1	638	370	517.4				
	361	519.4	787	474	646.2				
	359	513	768	469	634				
	495	709.5	1050.2	598.8	847.1				
	353	546.6	836	481	676.3				

418	612.2	902	547	742.2
349	460.6	657	447	562.5
370	515.8	734	511	633
348	462.4	660	446	563.7
391	550.5	768	452	625
184	232.4	354.3	261.8	312.7
211.2	278.9	401	290.6	351.3
175.3	233.6	365.3	250.1	313.5
214.6	289.5	430.3	298	370.8
227.6	280.5	396.3	310.3	358.2
207.2	277.6	407.6	288.8	354.1
220.9	282	421	310	371
175.3	233.6	365.3	250.1	313.5
214.6	289.5	430.3	298	370.8
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
202.5	281.6	425.2	279.3	359.5
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	404.7	256.6	338.1
171.2	219.9	339.9	244.5	297
170	220.5	342.1	242.9	297.5
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
240	312.6	459.5	330.5	401.5
203.2	253.7	379.2	271.3	330.6
215.5	284.2	415.9	287	357.9
196.7	254	372	280.4	330.8
171.2	219.9	339.9	244.5	297
214	269.6	381.3	298.8	344.2
192	255.2	360.5	262	316.2
197.2	272.4	403.3	271.8	344.1
170	220.5	342.1	242.9	297.5
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
181	230	351.9	257.7	309.5
170	220.5	342.1	242.9	297.5
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.7
206.8	279.8	391.3	275	339
238	311.7	449	319	390.5
244.4	296.8	429.9	341.3	390
248	335.5	484	336	417.4



246	299.7	434.6	343.5	394
248	343.7	517	351	442.3
281	355.3	520.1	390.6	461.8
267	314.8	446.9	371.8	413.1

City	Highway	Cons (mpg)	Distance (miles)	Distance (miles)	Comb Vol	Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT	EPA_INCR
N					4.2			4.2			
N					2.9			2.9			
N					4.2			4.2			
N					4.2			4.2			
N					3.8			3.8			
N					4.2			4.2			
N					3.8			3.8			
N					3.8			3.8			
N					4.2			4.2			
N					4.2			4.2			
N					3.8			3.8			
N					3.6			3.6			
N					4.2			4.2			
N					4.5			4.5			
N					4.8			4.8			
N					4.8			4.8			
N					4.8			4.8			
N					4.8			4.8			
N					5.3			5.3			
N					6.2			6.2			
N					4.3			4.3			
N					4.3			4.3			
N					5.6			5.6			
N					4.5			4.5			
N					5.6			5.6			
N					5.6			5.6			
N					4.8			4.8			
N					5			5			
N					4.8			4.8			
N					5			5			
N					4.8			4.8			
N					5			5			
N					5			5			
N					5.3			5.3			
N					3.8			3.8			
N					3.8			3.8			
N					5			5			
N					7.1			7.1			
N					5.6			5.6			
N					7.1			7.1			
N					5.9			5.9			
N					7.1			7.1			
N					7.1			7.1			
N					10			10			
N					7.7			7.7			

N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8

N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8

[illegible]





[illegible]



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Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.

**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Fri 8/17/2012 7:06:21 PM  
**Subject:** re: 2013 FE Guide - Errors in EPA's data base as of Aug 15, 2012; last day to make corrections for the Printed Guide is Aug 29, 2012  
VW Group 2013 FE Guide-all rel dates-no-sales-8-15-2012.xlsx

Richard

I'll send you the data in Verify as of Aug 15---even though I sent you an updated dataset yesterday. The Aug 15 dataset was double checked more thoroughly, includes the possible error regarding Stop-Start vehicles, etc. Thanks for your help correcting errors over the past month or so.

Attached are the data in Verify as of Aug 15, 2012. Please make any needed corrections (including corrections to the Verify Release 10 fields) as soon as possible. The last day to make corrections for the Printed Guide is August 29, 2012. Labels with pea green fill in the first few columns were not sent to DOE on Aug 16, 2012 for posting on the web. In the future, labels with pea green or dark green fill in the first few columns will not be sent to DOE for posting on the web. (Pea green fill means the error occurred in one of the Verify Release 9 fields. Dark green fill means an error occurred in one of the new Verify Release 10 fields.)

As you begin to correct the errors, please let me know if you need an up-to-date query of the data in Verify--e.g. next week or so and I'll be glad to email it to you.

Placeholder vehicles for the 2013 Printed Guide: As a reminder, please email me an excel spreadsheet with any 2013 alternative fuel/new technology placeholder vehicles (2013 vehicles for which the fuel economy will not be available by August 29, 2012)---including diesel vehicles, CNG vehicles, Electric vehicles, conventional hybrid vehicles, plug-in hybrid vehicles, FFVs and fuel cell vehicles. For more information about sending us your placeholder vehicles, please see Enclosure 2, Section 3 of the recent EPA guidance letter which was sent out on Monday (CD-12-10 Subject: Fuel Economy Label Information for 2013 Model Year). I need a spreadsheet with your placeholder vehicles by August 29, 2012.

I'll include my (edited) notes from previous emails for your convenience.

As usual, thanks for your help.

Dave

Edited notes from my previous email messages:

1. Correcting Errors: As usual, the errors and my comments are shown in the first two columns of the spreadsheet. Green fill in the first few columns means our macro detected an error. Labels with errors will not be included in the 2013 Printed Guide until the errors are corrected.
2. Voluntarily lowered Fuel Economy: For labels which you voluntarily lowered the mpg of your vehicles, EPA regulations require that you also increase the CO2 accordingly. Calculating the voluntarily increased combined CO2 value is fairly easy (knowing the unrounded adjusted mpg value, the rounded, voluntarily lowered mpg value, and the unrounded adjusted CO2 value). Our macro will check the voluntarily

increased city, highway and combined CO2 value for errors using the formula in the following example:

Given:

unrounded adjusted combined mpg = 21.6949 mpg

unrounded adjusted combined CO2 = 408.4 gpm

Voluntarily lowered Label mpg = 20 mpg

Then: Voluntarily increased CO2 = (21.6949 mpg x 408.4 gpm) / 20 mpg = 443.01 gpm; which rounds to 443 gpm CO2

3. Errors in Combined Adjusted Fuel Consumption: As indicated in a previous email to most manufacturers, I'm finding a lot of errors in the new field "Adjusted Combined Model Type Fuel Consumption." Some manufacturers are entering fuel economy values (mpg) values instead of fuel consumption (gallons per 100 miles). Some are incorrectly calculating fuel consumption using the (incorrect) unrounded adjusted combined mpg value instead of the correct rounded adjusted combined mpg value (as listed prominently on the 2013 labels (window stickers)---as explained in more detail in Item 4, below.

If there are errors in the fuel consumption value listed on the actual labels (window stickers) of your vehicles, please correct the labels as soon as practicable. Call or email me if you have questions about the fuel consumption values shown on the actual labels (window stickers) of your vehicles.

4. Mistake in the EPA Regulations for Calculating Fuel Consumption (600.311-12(c): For conventional vehicles (not EVs or PHEVs), there is a mistake in the current regulations at 600.311-12(c) which EPA proposed to correct in the 2017 greenhouse gas proposal (page 76FR 75392, Dec 1, 2011).

The current (incorrect) regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The unrounded value for combined fuel economy from 600.210-12(c)."

The (correct) proposed regulations read as follows: "Fuel Consumption Rate = (100/adjusted combined MPG), where "MPG = The value for combined fuel economy from 600.210-12(c) rounded to the nearest whole mpg." Please use the voluntarily lowered combined adjusted MPG value, if applicable.

We are making this change for several reasons, e.g. so that customers will be able to accurately calculate the fuel consumption of their vehicle from the information displayed on the label; so that two vehicles with the same combined fuel economy mpg values won't have different fuel consumption values displayed on the label, etc. One benefit to manufacturers and EPA is that this correction will result in fewer questions from consumers about how the fuel consumption values are calculated.

5. Request to update any 2013 FE Labels submitted to Verify before May 11, 2012: EPA and DOE are in the process of updating the information displayed at [www.fueleconomy.gov](http://www.fueleconomy.gov) to show the same type of information which is displayed on the 2013 window stickers, e.g. Fuel Economy (1-10) rating, Greenhouse Gas (1-10) Rating, Smog (1-10) rating, adjusted combined fuel consumption (values, adjusted combined CO2 (grams/mile) values, amount saved (or spent) over 5 years, battery charging time for EVs & PHEVs, etc. We anticipate that the website will be updated within the next couple of months. In addition, the Greenhouse Gas 1-10 score will be shown in the 2013 Printed Guide. For these reasons, we are requesting that manufacturers update any labels which were entered into EPA's Verify data base prior to May 11, 2012 (Verify Release 9 labels which don't contain this information).

EPA.com	VERIFY	cc	Model Yr (Mfr Name	Division (	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl
			2013 Audi	Audi	A3 ADX	59	2.0 4
Incorrect			2013 Audi	Audi	A3 ADX	73	2.0 4
			2013 Audi	Audi	A3 ADX	58	2.0 4
			2013 Audi	Audi	A3 quattro ADX	60	2.0 4
			2013 Audi	Audi	A4 ADX	35	2.0 4
			2013 Audi	Audi	A4 quattro ADX	37	2.0 4
			2013 Audi	Audi	A4 quattro ADX	40	2.0 4
			2013 Audi	Audi	A5 Cabriolet ADX	36	2.0 4
			2013 Audi	Audi	A5 Cabriolet ADX	39	2.0 4
			2013 Audi	Audi	A5 quattro ADX	38	2.0 4
			2013 Audi	Audi	A5 quattro ADX	41	2.0 4
			2013 Audi	Audi	A6 ADX	65	2.0 4
			2013 Audi	Audi	A6 quattro ADX	70	2.0 4
			2013 Audi	Audi	A6 quattro ADX	77	3.0 6
			2013 Audi	Audi	A7 quattro ADX	76	3.0 6
Relabeled			2013 Audi	Audi	A8 ADX	128	3.0 6
Stop-Start ??			2013 Audi	Audi	A8 ADX	98	4.0 8
Relabeled			2013 Audi	Audi	A8L ADX	129	3.0 6
Stop-Start ??			2013 Audi	Audi	A8L ADX	97	4.0 8
			2013 Audi	Audi	A8L ADX	109	6.3 12
			2013 Audi	Audi	allroad quattro ADX	134	2.0 4
			2013 Audi	Audi	Q5 ADX	91	2.0 4
Incorrect			2013 Audi	Audi	Q7 ADX	61	3.0 6
Diesel;			2013 Audi	Audi	Q7 ADX	53	3.0 6
			2013 Audi	Audi	RS5 ADX	49	4.2 8
			2013 Audi	Audi	RS5 Cabriolet ADX	52	4.2 8
			2013 Audi	Audi	S4 ADX	42	3.0 6
			2013 Audi	Audi	S4 ADX	45	3.0 6
			2013 Audi	Audi	S5 ADX	43	3.0 6
			2013 Audi	Audi	S5 ADX	46	3.0 6
			2013 Audi	Audi	S5 Cabriolet ADX	44	3.0 6
Stop-Start ??			2013 Audi	Audi	S6 ADX	48	4.0 8
Stop-Start ??			2013 Audi	Audi	S7 ADX	47	4.0 8
Stop-Start ??			2013 Audi	Audi	S8 ADX	99	4.0 8
			2013 Audi	Audi	TT Coupe convertible ADX	66	2.0 4
			2013 Audi	Audi	TT Roadster ADX	67	2.0 4
			2013 Audi	Audi	TT RS Coup ADX	69	2.5 5
			2013 Bentley	Bentley Motors	Continental BEX	110	6.0 12
			2013 Bentley	Bentley Motors	Continental BEX	108	4.0 8
			2013 Bentley	Bentley Motors	Continental BEX	113	6.0 12
			2013 Bentley	Bentley Motors	Continental BEX	107	4.0 8
			2013 Bentley	Bentley Motors	Continental BEX	111	6.0 12
Incorrect			2013 Bentley	Bentley Motors	Continental BEX	112	6.0 12
			2013 Bugatti	Bugatti	Veyron BGT	88	8.0 16
Incorrect			2013 Lamborghini	Lamborghini	Aventador NLX	92	6.5 12

	2013	Lamborghini	Lamborghini	Aventador NLX	93	6.5	12
	2013	Lamborghini	Lamborghini	Gallardo CNLX	30	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo CNLX	32	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo S NLX	31	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo S NLX	33	5.2	10
Diesel;	2013	Volkswage	Volkswage	BEETLE VWX	94	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	19	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	84	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	89	2.0	4
	2013	Volkswage	Volkswage	BEETLE VWX	17	2.5	5
	2013	Volkswage	Volkswage	BEETLE VWX	27	2.5	5
	2013	Volkswage	Volkswage	BEETLE COVWX	20	2.0	4
	2013	Volkswage	Volkswage	BEETLE CVWX	85	2.0	4
	2013	Volkswage	Volkswage	BEETLE COVWX	90	2.0	4
	2013	Volkswage	Volkswage	BEETLE COVWX	18	2.5	5
	2013	Volkswage	Volkswage	CC VWX	1	2.0	4
	2013	Volkswage	Volkswage	CC VWX	4	2.0	4
	2013	Volkswage	Volkswage	CC VWX	2	3.6	6
	2013	Volkswage	Volkswage	CC 4MOTIC VWX	3	3.6	6
	2013	Volkswage	Volkswage	Eos VWX	21	2.0	4
	2013	Volkswage	Volkswage	GOLF VWX	72	2.0	4
	2013	Volkswage	Volkswage	GOLF VWX	81	2.0	4
	2013	Volkswage	Volkswage	GOLF VWX	16	2.5	5
	2013	Volkswage	Volkswage	GOLF VWX	26	2.5	5
	2013	Volkswage	Volkswage	Golf R VWX	57	2.0	4
	2013	Volkswage	Volkswage	GTI VWX	22	2.0	4
	2013	Volkswage	Volkswage	GTI VWX	23	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	50	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	71	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	86	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	87	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	51	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	80	2.0	4
	2013	Volkswage	Volkswage	Jetta VWX	15	2.5	5
	2013	Volkswage	Volkswage	Jetta VWX	25	2.5	5
Diesel;	2013	Volkswage	Volkswage	JETTA SPO VWX	74	2.0	4
	2013	Volkswage	Volkswage	JETTA SP VWX	79	2.0	4
	2013	Volkswage	Volkswage	JETTA SPO VWX	14	2.5	5
	2013	Volkswage	Volkswage	JETTA SPO VWX	24	2.5	5
Diesel;	2013	Volkswage	Volkswage	Passat VWX	62	2.0	4
Diesel;	2013	Volkswage	Volkswage	Passat VWX	64	2.0	4
	2013	Volkswage	Volkswage	Passat VWX	83	2.5	5
	2013	Volkswage	Volkswage	Passat VWX	82	2.5	5
	2013	Volkswage	Volkswage	Passat VWX	63	3.6	6
	2013	Volkswage	Volkswage	TIGUAN VWX	68	2.0	4
	2013	Volkswage	Volkswage	TIGUAN VWX	56	2.0	4

Temporary	2013 Volkswagen	Volkswagen	TIGUAN 4I VWX	55	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	TOUAREG VWX	54	3.0	6
Temporary	2013 Volkswagen	Volkswagen	TOUAREG VWX	78	3.6	6
Hybrid;	2013 Volkswagen	Volkswagen	Touareg H VWX	75	3.0	6

Trans as I	City FE (GHwy FE (CComb FE Low'd CityLow'd HWLow'd CorCity UnadHwy UnadComb Unad						
Auto(AM-S	21	28	24		26.6	38.2	30.8102
Auto(AM-S	30	42	34		39.0935	59.3437	46.1856
Manual(M	21	30	24		25.3	40.3	30.3902
Auto(AM-S	21	28	24		27.2	37.1	30.9119
Auto(AV-Si	24	31	26		30.1185	44.4328	35.2251
Auto(S8)	20	30	24		25.6856	40.5676	30.7641
Manual(M	22	32	26		27.624	43.9699	33.1736
Auto(AV-Si	24	31	26		30.1185	44.4328	35.2251
Auto(S8)	20	30	24		25.6856	40.5676	30.7641
Auto(S8)	20	30	24		25.6856	40.5676	30.7641
Manual(M	22	32	26		27.624	43.9699	33.1736
Auto(AV-Si	25	33	28		31.4	46.9	36.8857
Auto(S8)	20	30	24		25.6856	40.5676	30.7641
Auto(S8)	18	27	22		23.1369	38.1	28.1037
Auto(S8)	18	28	21		22.5575	37.3745	27.4556
Auto(S8)	16	26	21	Adjusted CO2 value, we calculate 418.3; Stop-Start is N--please double check that the CO2 correction factor is that of the testing w	22.5575	37.3745	27.4556
Auto(S8)	17	28	21	enabled). Please revise Verify as needed.	21.7885	38.4	27.0553
Auto(S8)	16	26	21	Adjusted CO2 value, we calculate 418.3; Stop-Start is N--please double check that the CO2 correction factor is that of the testing w	22.5575	37.3745	27.4556
Auto(S8)	16	26	19	enabled). Please revise Verify as needed.	19.8586	33.9	24.4081
Auto(S8)	13	21	16		15.9	25.7	19.1935
Auto(S8)	20	27	23		25.2	37.3	29.5075
Auto(S8)	20	28	23		24.8	38.6	29.5548
Auto(S8)	16	22	18		19.2813	29.852	22.9361
Auto(S8)	19	28	22		22.8	39.1	28.0649
Auto(AM-S	16	23	18		19.1	30	22.8332
Auto(AM-S	16	22	18		19.2	28.9	22.6159
Auto(AM-S	18	28	21		22.4	35.8	26.9372
Manual(M	17	26	20		20	33.4	24.4063
Auto(AM-S	18	28	21		22.4	35.8	26.9372
Manual(M	17	26	20		20	33.4	24.4063
Auto(AM-S	18	26	21		22.1	34.7	26.4165
Auto(AM-S	17	27	20	enabled). Please revise Verify as needed.	20.7539	35.335	25.4866
Auto(AM-S	17	27	20	enabled). Please revise Verify as needed.	20.7539	35.335	25.4866
Auto(S8)	15	26	19	enabled). Please revise Verify as needed.	19	33.3	23.5511
Auto(AM-S	22	31	26		28.4068	42.2579	33.3217
Auto(AM-S	22	31	26		28.4068	42.2579	33.3217
Manual(M	18	25	20		21.2	34.2	25.5746
Auto(S6)	11	19	14		13.7	24.6	17.112
Auto(S8)	15	24	18		19	33.5	23.5959
Auto(S6)	12	19	14		13.9	24.7	17.3049
Auto(S8)	14	24	17		17.4	30.8	21.6358
Auto(S6)	11	19	14		13.7	24.6	17.112
Auto(S6)	12	19	14		13.9	24.7	17.3049
Auto(AM-S	8	15	10		10	17.9	12.4782
Auto(AM-S	11	18	13		12.6	25.2	16.2581



Auto(AM-S	10	16	12	11.5	21.2	14.4817
Auto(AM-S	13	20	16	16.1	25.4	19.276
Manual(M€	12	20	15	14	24	17.2308
Auto(AM-S	13	20	16	16	25.4	19.197
Manual(M€	12	20	14	13	22.6	16.0722
Auto(AM-S	29	39	32	37.3	55.3	43.7011
Auto(AM-S	22	30	25	26.5	42.0656	31.7942
Manual(M€	28	41	32	36.066	57.9978	43.4617
Manual(M€	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M.	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S	21	29	24	26.8	40.2092	31.532
Manual(M€	28	41	32	36.066	57.9978	43.4617
Manual(M.	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S	22	31	25	26.977	42.4936	32.2814
Manual(M.	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S	22	30	25	27.5	41.5	32.4219
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Manual(M€	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M.	23	33	26	26.3044	44.5088	32.2378
Manual(M€	19	27	22	23.9	37.1	28.456
Auto(AM-S	24	33	27	29.9333	43.5096	34.8229
Manual(M.	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M.	24	34	28	28.8	46.2	34.6771
Manual(M.	22	33	26	26.5556	44.9945	32.56
Manual(M€	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M.	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	29	39	33	37.6	56.2	44.1798
Manual(M€	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M.	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S	30	40	34	37.9	56.8	44.5744
Manual(M.	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M.	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M€	18	26	21	21.7	35.8	26.3745

calculate 343; Please revise Verify as needed.

Auto(S8)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Highway	Urban	Comb	Unl	Guzzler?	Air Aspir	Air Aspir	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbochar	AMS	Automate			6
29.8946	41.5209	34.2046			TC	Turbochar	AMS	Automated			6
20.8146	29.9953	24.1394			TC	Turbochar	M	Manual			6
20.891	28.1035	23.6187			TC	Turbochar	AMS	Automate			6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual			6
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
22.2425	32.0861	25.8049			TC	Turbochar	M	Manual			6
24.5044	32.5529	27.5721			TC	Turbochar	SCV	Selectable			8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto			8
18.3949	27.2332	21.5408			SC	Superchar	SA	Semi-Auto			8
17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto			8
as performed with the stop-start feature enabled). Please revise/clarify as needed.	17.8058	27.5484	21.1758		SC	Superchar	SA	Semi-Auto			8
as performed with the stop-start feature enabled). Please revise/clarify as needed.	17.2616	28.4347	20.9695		TC	Turbochar	SA	Semi-Auto			8
as performed with the stop-start feature enabled). Please revise/clarify as needed.	17.2616	28.4347	20.9695		TC	Turbochar	SA	Semi-Auto			8
16.0273	25.8053	19.3219			TC	Turbochar	SA	Semi-Auto			8
13.1387	20.6025	15.6978	G		NA	Naturally	SA	Semi-Auto			8
19.9584	26.6824	22.5112			TC	Turbochar	SA	Semi-Auto			8
19.7289	28.2351	22.823			TC	Turbochar	SA	Semi-Auto			8
15.522	21.5458	17.7559			SC	Superchar	SA	Semi-Auto			8
18.74	27.62	21.9099			TC	Turbochar	SA	Semi-Auto			8
15.7409	23.3075	18.4339			NA	Naturally	AMS	Automate			7
15.8793	22.1836	18.2078			NA	Naturally	AMS	Automate			7
18.117	27.558	21.419			SC	Superchar	AMS	Automate			7
17.0438	26.023	20.1767			SC	Superchar	M	Manual			6
18.117	27.558	21.419			SC	Superchar	AMS	Automate			7
17.0438	26.023	20.1767			SC	Superchar	M	Manual			6
17.6699	25.953	20.6333			SC	Superchar	AMS	Automate			7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automate			7
16.761	26.9697	20.2022			TC	Turbochar	AMS	Automate			7
15.2801	25.5632	18.6574			TC	Turbochar	SA	Semi-Auto			8
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automate			6
22.407	31.1674	25.6515			TC	Turbochar	AMS	Automate			6
17.751	25.2021	20.4751			TC	Turbochar	M	Manual			6
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto			6
15.0109	24.4645	18.1706			TC	Turbochar	SA	Semi-Auto			8
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto			6
14.0639	23.9773	17.2766	G		TC	Turbochar	SA	Semi-Auto			8
11.2476	18.7327	13.7134	G		TC	Turbochar	SA	Semi-Auto			6
11.5043	18.877	13.9574	G		TC	Turbochar	SA	Semi-Auto			6
8.4232	14.7698	10.4424	G		TC	Turbochar	AMS	Automate			7
10.6055	18.4729	13.1199	G		NA	Naturally	AAMS	Automated			7

9.7957	16.2453	11.9264G	NA	Naturally #AMS	Automated	7
13.4655	19.7573	15.718G	NA	Naturally #AMS	Automated	6
12.0883	19.9831	14.7021G	NA	Naturally #M	Manual	6
13.3954	19.7741	15.6701G	NA	Naturally #AMS	Automated	6
11.5388	19.5451	14.1465G	NA	Naturally #M	Manual	6
28.6469	38.87	32.4925	TC	TurbochargedAMS	Automated	6
22.0202	29.5574	24.8746	TC	TurbochargedAMS	Automated	6
27.8088	40.6616	32.4203	TC	TurbochargedM	Manual	6
20.5408	29.7034	23.8517	TC	TurbochargedM	Manual	6
22.2864	28.5683	24.7338	NA	Naturally #SA	Semi-Auto	6
21.7201	30.6767	25.0054	NA	Naturally #M	Manual	5
21.1383	28.6751	23.9738	TC	TurbochargedAMS	Automated	6
27.8088	40.6616	32.4203	TC	TurbochargedM	Manual	6
20.5408	29.7034	23.8517	TC	TurbochargedM	Manual	6
21.2302	26.9749	23.4804	NA	Naturally #SA	Semi-Auto	6
21.8706	31.0367	25.2227	TC	TurbochargedAMS	Automated	6
20.8232	31.7255	24.6324	TC	TurbochargedM	Manual	6
17.4935	26.5716	20.6716	NA	Naturally #SA	Semi-Auto	6
16.9415	25.219	19.8774	NA	Naturally #SA	Semi-Auto	6
21.7634	30.1121	24.8658	TC	TurbochargedAMS	Automated	6
29.8946	41.5209	34.2046	TC	TurbochargedAMS	Automated	6
29.6183	41.8508	34.104	TC	TurbochargedM	Manual	6
23.6446	31.0458	26.486	NA	Naturally #SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally #M	Manual	5
19.278	26.8882	22.0917	TC	TurbochargedM	Manual	6
24.2237	32.5108	27.3624	TC	TurbochargedAMS	Automated	6
21.2839	30.8324	24.7304	TC	TurbochargedM	Manual	6
23.7854	31.6043	26.7652	TC	TurbochargedAMS	Automated	6
29.8946	41.5209	34.2046	TC	TurbochargedAMS	Automated	6
23.1009	29.1554	25.4822	NA	Naturally #SA	Semi-Auto	6
24.3944	33.6309	27.8344	NA	Naturally #M	Manual	5
21.8931	32.6043	25.6912	TC	TurbochargedM	Manual	6
29.6183	41.8508	34.104	TC	TurbochargedM	Manual	6
23.6446	31.0458	26.486	NA	Naturally #SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally #M	Manual	5
28.8556	39.4682	32.8278	TC	TurbochargedAMS	Automated	6
29.6183	41.8508	34.104	TC	TurbochargedM	Manual	6
23.6446	31.0458	26.486	NA	Naturally #SA	Semi-Auto	6
22.7343	32.7402	26.3594	NA	Naturally #M	Manual	5
30.4633	40.2057	34.1916	TC	TurbochargedAMS	Automated	6
30.8024	42.6219	35.1943	TC	TurbochargedM	Manual	6
22.1078	30.6611	25.2814	NA	Naturally #SA	Semi-Auto	6
21.8993	32.1378	25.5642	NA	Naturally #M	Manual	5
19.7174	27.8048	22.6868	NA	Naturally #AMS	Automated	6
20.6233	26.0617	22.7606	TC	TurbochargedSA	Semi-Auto	6
18.1488	26.2617	21.0791	TC	TurbochargedM	Manual	6

20.402	25.8545	22.5412	TC	TurbocharçSA	Semi-Auto	6
19.649	28.9961	22.9829	TC	TurbocharçSA	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally ASA	Semi-Auto	8
19.8843	23.7762	21.4655	SC	SupercharçSA	Semi-Auto	8

Lockup T	Trans C	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Automated Manual with paddles)	N	F	2-Wheel DDADXV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	2-Wheel DDVW XV02.0U5N			5	DU	Diesel, ultr	
N	N	F	2-Wheel DDADXV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDADXV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDVW XV06.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXT02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXT03.0		10		GP	Gasoline (I	
Y	N	A	All Wheel IDADXT03.03UG			5	DU	Diesel, ultr	
Automated Manual with paddles)	N	F	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDADXV02.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDADXV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Automated Manual with paddles)	N	F	All Wheel IDBGTV08.0		10		GPR	Gasoline (F	
Automated Manual with paddles)	N	F	All Wheel IDNLXV06.0		10		GPR	Gasoline (I	

Automated Manual with paddles)	All Wheel	IDNLXV06.5	10		GPR	Gasoline (F
Automated Manual with paddles)	All Wheel	IDAD XV05.1	10		GP	Gasoline (F
N N A	All Wheel	IDAD XV05.1	10		GP	Gasoline (I
Automated Manual with paddles)	All Wheel	IDAD XV05.1	10		GP	Gasoline (F
N N A	All Wheel	IDAD XV05.1	10		GP	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (I
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (I
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
Y N F	2-Wheel	DDVWXV03.0	10		GP	Gasoline (F
Y N A	All Wheel	IDVWXV03.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N A	All Wheel	IDAD XV02.0	10		GP	Gasoline (I
Automated Manual with paddles)	2-Wheel	DDAD XV02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDAD XV02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (F
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXV02.0U5N		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV02.0U4S		5	DU	Diesel, ultr
N N F	2-Wheel	DDVWXV02.0U4S		5	DU	Diesel, ultr
Y N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
N N F	2-Wheel	DDVWXV02.0	10		G	Gasoline (F
Automated Manual with paddles)	2-Wheel	DDVWXV03.0	10		GP	Gasoline (F
Y N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (I
N N F	2-Wheel	DDVWXJ02.0	10		GP	Gasoline (I

Y	N	A	All Wheel IDVWXJ02.	10		GP	Gasoline (I
Y	N	A	All Wheel IDADXT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel IDVWXT03	10		GP	Gasoline (I
Y	N	A	All Wheel IDVWXT03.	10		GP	Gasoline (F



2017-FFP 004588



m Unleaded Recommended)	Truck
MPG (15 miles per gallon)	Truck
m Unleaded Recommended)	Truck
MPG (15 miles per gallon)	Truck

Annual Fuel Economy	EPA Calculation	Comment	City2 FE (l/100mi)	Hwy2 FE (l/100mi)	Low'd City2 FE (l/100mi)	Low'd Hwy2 FE (l/100mi)	Low'd City2 FE (l/100mi)	Low'd Hwy2 FE (l/100mi)	City2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C							
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation							
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values							
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v							
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unroun							
2400	2400	added A6 quattro configuartion data to the base level, corrected gas guzzler MPG valuwe and							
2200	2200								
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th							
2400	2400	added A6 quattro configuartion data to the base level; corrected gas guzzler MPG valuwe and							
2400	2400	added A6 quattro configuartion data to the base level; corrected gas guzzler MPG valuwe and							
2200	2200								
2050	2050	corrected forward speeds to 8, for this CVT trans							
2400	2400	corrected gas guzzler MPG valuwe and gallons per 100 value...these values were switched							
2600	2600								
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th							
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value							
2700	2700								
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrnd city CO2 value corrected							
3000	3000								
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con							
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c							
2500	2500	corrected unadj unrounded highway and conbined values							
3150	3150	CO2 corrections, again Aug 14th							
2600	2600	CO2 corrections, additonal fuel costs in saving field, corrected Aug 14th							
3150	3150	CO2 corrections							
3150	3150	corrected city CO2 value, typo							
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una							
2700	2700	corrected city unadj unrounded CO2 , Aug 14th							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una							
2700	2700	corrected unadj and adj CO2 values, Aug 14th							
2850	2850	CO2 corrections							
2850	2850	CO2 corrections							
3000	3000								
2200	2200	CO2 corrections, Aug 14th correction							
2200	2200	CO2 corrections, Aug 14th							
2850	2850								
4050	4050	corrected i8	13	10				9.5	
3150	3150								
4050	4050	correct adj i8	14	10				10.3	
3350	3350								
4050	4050	corrected i8	13	10				9.5	
4050	4050	8	14	10				10.3	
5700	5700	corrected lock out to "yes" and AMS.							
4400	4400	lock up to YES., CO2 corrections Aug 14							

4750 4750 adjusted release date, lock up to YES., CO2 corrections Aug 14th  
 3550 3550 corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th  
 3800 3800  
 3550 3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
 4050 4050  
 1800 1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
 2300 2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 corrected CO2 values  
 2150 2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
 2150 2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
 2400 2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 CO2 corrections, fuel spending corrected to \$400  
 2300 2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
 2300 2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
 2300 2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
 2700 2700 update after Verify release 10  
 2850 2850 UPDATE after Verify release 10  
 2300 2300 CO2 corrections  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 comb correction  
 2600 2600 CO2 corrections  
 2100 2100 CO2 corrections  
 2300 2300 early label, upate after Verify release 10  
 2100 2100 corrected unadjusted unrounded CO2 highway and conbined values and combined adjusted w  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation  
 2150 2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
 1900 1900 FE and GHG ratings corrected to 7  
 2200 2200 CO2 corrections  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1750 1750 CO2 corrections; inhouse dervied 5-cycle formula corrected Aug 15th  
 1700 1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1700 1700  
 1650 1650  
 2150 2150 CO2 corrections  
 2050 2050 CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
 2500 2500 CO2 correction  
 2500 2500 corrected CO2 values  
 2700 2700 CO2 corrections

2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections
2500	2500 CO2 corrections
3000	3000
2700	2700 CO2 corrections

	Hwy2 Unit	Comb2 Unit	Hwy2 Unit	Comb2 Unit	Range2 - Fuel2 Usr	Fuel2 Usr	Fuel2 Unit	Fuel2 Unit
02								

ded CO2 value again, second time Aug 14th  
gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
gallons per 100 value...these values were switched

sumption to 6.2 per ASTM rounding procedure  
ity and highway CO2 values

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E)MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E)MPG	miles per g
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E)MPG	miles per g
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E)MPG	miles per g

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th

roup

nrounded highway and combined CO2 values

o 29 MPG

ycle formular corrected Aug 15th

ed MPG value

nd corresponding 5-cycle values

cted calculated values

hole CO2 value





Relative Fuel	CO2	CO2	CO2	CO2	Fuel2 EPA	Descripto	Intake Val	Exhaust V	Carline CI	Carline CI
4612	Ann	City	CO2	Comb	CO2	Fuel2 EPA	Descripto	Intake Val	Exhaust V	Carline CI
						SIDI;	2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	27	Small Stati	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI; Unde	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI; Unde	2	26	Large Cars	
						SIDI;	2	26	Large Cars	
						SIDI;	2	26	Large Cars	
						SIDI;	2	27	Small Stati	
						SIDI;	2	231	Small SUV 4WD	
						SIDI;	2	233	Standard SUV 4W	
						SIDI;	2	233	Standard SUV 4W	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact C	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	23	Subcompa	
						SIDI;	2	21	Two Seate	
						SIDI;	2	23	Subcompa	
4650	794	469	648	4650	FFV;	2	25	Midsize Ca		
					SIDI;	2	24	Compact C		
4650	794	469	648	4650	FFV;	2	24	Compact C		
					SIDI;	2	23	Subcompa		
4650	794	469	648	4650	FFV;	2	23	Subcompa		
4650	794	469	648	4650	FFV;	2	23	Subcompa		
					SIDI;	2	21	Two Seate		
					SIDI;	2	21	Two Seate		

	2	21	Two Seate
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seate
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	23	Subcompa
	2	23	Subcompa
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	23	Subcompa
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	24	Compact C
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	1	15	Midsize Ca
	1	15	Midsize Ca
SIDI;	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	27	Small Stati
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
	2	25	Midsize Ca
SIDI;	2	25	Midsize Ca
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD

SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
car	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
car	Derived 5-cycle label	6/22/2012	12150	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12092	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12093	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/21/2012	12101	N	N	
car	Vehicle Specific 5-cycle	6/22/2012	12072	N	N	
car	Vehicle Specific 5-cycle	6/22/2012	12071	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
car	Derived 5-cycle label	4/26/2012	11490	N	N	
D	Vehicle Specific 5-cycle	7/11/2012	11319	N	N	
D	Derived 5-cycle label	6/11/2012	12103	N	N	
car	Vehicle Specific 5-cycle	7/16/2012	12105	N	N	
car	Vehicle Specific 5-cycle	4/8/2012	11510	N	N	
car	Vehicle Specific 5-cycle	2/13/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12106	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12108	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12111	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	8/27/2012	12122	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12115	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12113	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12116	N	N	
car	Vehicle Specific 5-cycle	4/9/2012	10208	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12119	N	N	
car	Vehicle Specific 5-cycle	4/9/2012	10207	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12117	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	10184	N	N	
car	Vehicle Specific 5-cycle	7/12/2012	11087	N	N	
car	Vehicle Specific 5-cycle	8/7/2012	12124	N	N	

car	Vehicle Specific 5-cycle 6/14/2013	12126	N	N
car	Vehicle Specific 5-cycle 6/11/2012	12128	N	N
car	Vehicle Specific 5-cycle 6/20/2012	10237	N	N
car	Vehicle Specific 5-cycle 6/21/2012	12130	N	N
car	Vehicle Specific 5-cycle 6/20/2012	10238	N	N
car	Derived 5-cycle label 7/19/2012	12135	N	N
car	Vehicle Specific 5-cycle 7/30/2012	10187	N	N
car	Derived 5-cycle label 6/25/2012	12155	N	N
car	Vehicle Specific 5-cycle 7/12/2012	11525	N	N
car	Vehicle Specific 5-cycle 7/30/2012	10751	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11373	N	N
car	Derived 5-cycle label 7/30/2012	10277	N	N
car	Derived 5-cycle label 6/25/2012	12156	N	N
car	Vehicle Specific 5-cycle 7/12/2012	11526	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11287	N	N
car	Vehicle Specific 5-cycle 1/16/2012	10186	N	N
car	Vehicle Specific 5-cycle 1/25/2012	11044	N	N
car	Vehicle Specific 5-cycle 1/16/2012	10532	N	N
car	Vehicle Specific 5-cycle 1/16/2012	10534	N	N
car	Vehicle Specific 5-cycle 6/11/2012	11527	N	N
car	Derived 5-cycle label 6/22/2012	12149	N	N
car	Derived 5-cycle label 6/25/2012	12154	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11528	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11529	N	N
car	Vehicle Specific 5-cycle 6/11/2012	11530	N	N
car	Vehicle Specific 5-cycle 6/16/2012	11531	N	N
car	Vehicle Specific 5-cycle 7/30/2012	10531	N	N
car	Vehicle Specific 5-cycle 6/18/2012	11372	N	N
car	Derived 5-cycle label 6/22/2012	12148	N	N
car	Vehicle Specific 5-cycle 6/29/2012	11219	N	N
car	Vehicle Specific 5-cycle 6/29/2012	11300	N	N
car	Vehicle Specific 5-cycle 6/16/2012	11532	N	N
car	Derived 5-cycle label 6/25/2012	12153	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11533	N	N
car	Vehicle Specific 5-cycle 7/30/2012	11535	N	N
cars	Derived 5-cycle label 6/25/2012	12151	N	N
cars	Derived 5-cycle label 6/25/2012	12152	N	N
cars	Vehicle Specific 5-cycle 7/30/2012	11534	N	N
cars	Vehicle Specific 5-cycle 7/30/2012	11536	N	N
car	Vehicle Specific 5-cycle 6/11/2012	10158	N	N
car	Vehicle Specific 5-cycle 6/18/2012	10163	N	N
car	Vehicle Specific 5-cycle 6/23/2012	11539	N	N
car	Vehicle Specific 5-cycle 6/23/2012	11547	N	N
car	Vehicle Specific 5-cycle 6/11/2012	11554	N	N
	Derived 5-cycle label 6/18/2012	11556	N	N
	Vehicle Specific 5-cycle 6/11/2012	11558	N	N

	Derived 5-cycle label 6/11/2012	12157		N	N
D	Vehicle Specific 5-cycle 6/18/2012	11563		N	N
D	Derived 5-cycle label 6/25/2012	10319		N	N
D	Derived 5-cycle label 6/25/2012	11559		N	N

2017-FFP 004603



N	N	Y	ELECTRONY	HYDRAULI(N
N	N	ENGINE CCN	Y	INLET ANDN
N	N	ENGINE CN	Y	INLET ANIN
N	N	ENGINE CCN	Y	INLET ANDN
N	N	ENGINE CN	Y	INLET ANIN
N	N	N	N	N
N	N	N	Y	position ofN
N	N	N	N	N
N	N	N	Y	position of N
N	N	N	Y	INLET COIN
N	N	N	Y	INLET CONN
N	N	N	Y	position ofN
N	N	N	N	N
N	N	N	Y	position ofN
N	N	N	Y	INLET CONN
N	N	N	Y	position ofN
N	N	N	Y	position ofN
N	N	N	Y	position ofN
N	N	N	Y	position ofN
N	N	N	Y	CONTINU(N
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONN
N	N	N	Y	INLET CONN
N	N	ENGINE CN	Y	CONTINU(N
N	N	ENGINE CCN	Y	CONTINUCN
N	N	ENGINE CCN	Y	CONTINUCN
N	N	N	Y	position ofN
N	N	N	N	N
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	position ofN
N	N	N	N	N
N	N	N	Y	INLET CONN
N	N	N	Y	INLET CONN
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONN
N	N	N	Y	INLET CONN
N	N	SCR EquipfN	N	N
N	N	SCR EquipfN	N	N
N	N	N	Y	INLET CONN
N	N	N	Y	INLET CONN
N	N	N	Y	Electronic N
N	N	N	Y	position of N
N	N	N	Y	position of N

N	N	N	Y	position of N	
N	N	N	N	N	
N	N	N	Y	INTAKE / EN	
N	N	V6 CYLIND N	Y	MECHANICAL	Battery(s)

Device Design# Battery# Battery Ty Battery Ty Total Volt Batt Ener Batt Spec Batt Char Comment# Capacit

in the observation of the effects of the various design parameters on the efficiency of the injection process (including the effect of the size of the nozzle) and the effect of the nozzle on the flow rate of the injection process. The nozzle is to be tolled and hydraulically adjusted.

in the observation of the effects of the various design parameters on the efficiency of the injection process (including the effect of the size of the nozzle) and the effect of the nozzle on the flow rate of the injection process. The nozzle is to be tolled and hydraulically adjusted.

STMENT

MECHANICAL-HYDRAULIC

in the observation of the effects of the various design parameters on the efficiency of the injection process (including the effect of the size of the nozzle) and the effect of the nozzle on the flow rate of the injection process. The nozzle is to be tolled and hydraulically adjusted.

MECHANICAL-HYDRAULIC

in the observation of the effects of the various design parameters on the efficiency of the injection process (including the effect of the size of the nozzle) and the effect of the nozzle on the flow rate of the injection process. The nozzle is to be tolled and hydraulically adjusted.

MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

CONTINUOUSLY VVT  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
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controlled and hydraulically adjusted  
controlled and hydraulically adjusted

controlled and hydraulically adjusted

RAULICALLY AND CONTROLLED ELECTRONICALLY

AMS	1 NiMH	288	6	21.5 On-Board
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es(2) bined gear at this loer, FGT grea tter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea tter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea tter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea tter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

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es(2) bined gear at this loer, FGT grea tter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2) bined gear at this loer, FGT grea tter by lin 4EC, hea gIs ne speed 930 to 3500 RPM, vehicle speed greater than 25 km



Other BRAKE PEBoth N

1Other





MFI	Multipoint	N	N	5W30 VW
GDI	Spark Ignit		N	10W60 VW
GDI	Spark Ignit		N	10W60 VW
GDI	Spark Ignit		N	10W60 VW
GDI	Spark Ignit		N	10W60 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
GDI	Spark Ignit		N	5W40 VW
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W-40 VW
GDI	Spark Ignit		N	5W-40 VW
GDI	Spark Ignit		N	5W40 / VW
CRDI	Common FN		N	5W40
CRDI	Common FN		N	5W40
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40
GDI	Spark Ignit		N	5W40
GDI	Spark Ignit		N	5W40
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
MFI	Multipoint		N	5W40 VW
MFI	Multipoint		N	5W40 VW
GDI	Spark Ignit		N	5W40 VW
CRDI	Common FN		N	5W40
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
CRDI	Common FN		N	5W40
CRDI	Common FN		N	5W40
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
CRDI	Common F		N	5W40 VW
CRDI	Common F		N	5W40 VW
MFI	Multipoint		N	10W40 / V
MFI	Multipoint		N	10W40 / V
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W40 VW
GDI	Spark Ignit		N	5W40 VW

		GDI	Spark Ignit		N	5W40 VW
		CRDI	Common F		N	5W30 VW
		GDI	Spark Ignit		N	5W40 VW
3 PHASE CI	34	GDI	Spark IgnitN	N	N	5W40 VW

Stop/StartStop/StartTrans in FETrans as IModel TypCharge De Charge De Charge SuCharge SuEPA Calcul

N	No	Auto(AM-5Auto(AM-5
N	No	Auto(AM-5Auto(AM-5
N	No	Manual(M Manual(M6A3 frt man
N	No	Auto(AM-5Auto(AM-5A3 quattro
N	No	Auto(AV-S;Auto(AV-S
N	No	Auto(S8) Auto(S8)
N	No	Manual(M Manual(M
N	No	Auto(AV-S;Auto(AV-S
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Manual(M Manual(M6
N	No	Auto(AV-S;Auto(AV-SAudi A6 Cv
N	No	Auto(S8) Auto(S8)
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N	No	Auto(S8) Auto(S8) Audi Q7
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N	No	Auto(S8) Auto(S8)
N	No	Auto(AM-5Auto(AM-5TT Coupe c
N	No	Auto(AM-5Auto(AM-5TT Coupe c
N	No	Manual(M Manual(M6TTRS
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
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N	No	Auto(S8) Auto(S8)
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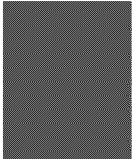
50700	No	Auto(AM-5Auto(AM-5
50500	No	Auto(AM-5Auto(AM-5
50500	No	Manual(MManual(MGallardo C
50500	No	Auto(AM-5Auto(AM-5
50500	No	Manual(MManual(MGallardo S
N	No	Auto(AM-5Auto(AM-5
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N	No	Manual(MManual(M
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N	No	Auto(S6) Auto(S6)
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N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M Manual(M
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N	No	Auto(S6) Auto(S6)
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N	No	Auto(S6) Auto(S6)
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N	No	Auto(S6) Auto(S6)
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N	No	Auto(AM-5Auto(AM-5
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N	No	Manual(MManual(M

N	No	Auto(S6)	Auto(S6)	
N	No	Auto(S8)	Auto(S8)	
N	No	Auto(S8)	Auto(S8)	
N	No	Auto(S8)	Auto(S8)	Touareg H

Model Year	Model	EPA Calculated Gas Mileage (mpg)	EPA Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
30.8			6	6 DAD XV02.0		7		
46.2			9	8 DVW XV02.0		5		
30.4			6	6 DAD XV02.0		7		
30.9			6	6 DAD XV02.0		5		
35.2			7	7 DAD XV02.0		5		
30.8			6	6 DAD XV02.0		5		
33.2			7	7 DAD XV02.0		5		
35.2			7	7 DAD XV02.0		5		
30.8			6	6 DAD XV02.0		5		
30.8			6	6 DAD XV02.0		5		
33.2			7	7 DAD XV02.0		5		
36.9			7	7 DAD XV02.0		5		
30.8			6	6 DAD XV02.0		5		
28.1			5	5 DAD XJ03.0		5		
27.5			5	5 DAD XJ03.0		5		
27.5			5	5 DAD XJ03.0		5		
27.1			5	5 DAD XV04.0		5		
27.5			5	5 DAD XJ03.0		5		
24.4			4	4 DAD XV04.0		5		
19.3			3	3 DVW XV06.0		5		
29.5			6	6 DAD XV02.0		5		
28.8			6	6 DAD XT02.0		5		
22.9			4	4 DAD XT03.0		5		
28.1			5	4 DAD XT03.0		5		
23			4	4 DAD XV04.0		5		
22.6			4	4 DAD XV04.0		5		
26.9			5	5 DAD XJ03.0		5		
23.5			5	5 DAD XJ03.0		5		
26.9			5	5 DAD XJ03.0		5		
23.5			5	5 DAD XJ03.0		5		
26.4			5	5 DAD XJ03.0		5		
25.5			5	5 DAD XV04.0		5		
25.5			5	5 DAD XV04.0		5		
23.6			4	4 DAD XV04.0		5		
33.3			7	7 DAD XV02.0		5		
33.3			7	7 DAD XV02.0		5		
25.6			5	5 DAD XV02.0		5		
17.2			2	2 DBEXV06.0		5		
23.6			4	4 DAD XV04.0		5		
17.4			2	2 DBEXV06.0		5		
21.8			4	4 DAD XV04.0		5		
17.2			2	2 DBEXV06.0		5		
17.4			2	2 DBEXV06.0		5		
12.6			1	1 DBGTV08.0		5		
16.4			2	2 DNL XV06.0		5		

14.5		1	1 DNLXV06.5	5
19.4		3	3 DADXV05.1	5
17.4		3	3 DADXV05.1	5
19.3		3	3 DADXV05.1	5
16.1		2	2 DADXV05.1	5
43.7		8	7 DVWXV02.1	5
31.8		6	6 DVWXV02.1	7
43.4		8	7 DVWXV02.1	5
30.7		6	6 DVWXV02.1	7
31.6		6	6 DVWXV02.1	7
31.9		6	6 DVWXV02.1	7
31.5		6	6 DVWXV02.1	7
43.4		8	7 DVWXV02.1	5
30.7		6	6 DVWXV02.1	7
30.3		6	6 DVWXV02.1	7
32.3		6	6 DVWXV02.1	7
31.8		6	6 DVWXV02.1	7
25.8		5	5 DVWXV03.1	5
24.8		5	5 DVWXV03.1	5
32.4		6	6 DVWXV02.1	5
46.2		9	8 DVWXV02.1	5
46		9	8 DVWXV02.1	5
33.1		7	7 DVWXV02.1	7
32.2		7	7 DVWXV02.1	7
28.5		5	5 DADXV02.1	5
34.8		7	7 DADXV02.1	7
31.2		6	6 DADXV02.1	7
35		7	7 DVWXV02.1	7
46.2		9	8 DVWXV02.1	5
32.9		6	6 DVWXV02.1	5
34.7		7	7 DVWXV02.1	5
32.6		7	7 DVWXV02.1	7
46		9	8 DVWXV02.1	5
33.1		7	7 DVWXV02.1	7
32.2		7	7 DVWXV02.1	7
44.2		8	7 DVWXV02.1	5
46		9	8 DVWXV02.1	5
33.1		7	7 DVWXV02.1	7
32.2		7	7 DVWXV02.1	7
44.6		9	8 DVWXV02.1	5
46.4		9	8 DVWXV02.1	5
31.9		6	6 DVWXV02.1	7
31.7		7	7 DVWXV02.1	7
28.5		6	6 DVWXV03.1	5
29.9		6	6 DVWXJ02.1	5
26.4		5	5 DVWXJ02.1	5



29.6		6	6DVWXJ02.	5
23.3		6	5DADXT03.(	5
25		4	4DVWXT03	5
28.2		5	5DVWXT03.	5

Signal 10 Pull #507 (for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DADXV02.0 5

DADXV02.0 5

DVWXJ02.0 5

DVWXJ02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5

DVWXV02.0 5



Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)
Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)	Highway Miles per Gallon (City/Highway/Combined)
	400	432	319	381	333
3100		340	244	297	259.8
	400	442	296	376	350
	400	442	316	385	325
600		373	304	342	293.8
	400	437	297	374	345.7
600		397	276	343	320.4
600		373	304	342	293.8
	400	437	297	374	345.7
	400	437	297	374	345.7
600		397	276	343	320.4
1350		360	272	320	282
	400	437	297	374	345.7
	1400	482	326	412	383.5
	1900	498	321	418	393.5
	1900	498	321	418	393.5
	1900	515	313	424	409.5
	1900	498	321	418	393.5
	3400	554	345	460	447.5
	6150	675	430	565	559
	900	444	333	394	352
	900	450	314	389	358
	4150	573	412	500	460.9
	1400	541	369	464	446
	4150	562	379	480	466
	4150	558	398	486	463
	1900	488	321	413	396
	2650	441	355	402	443
	1900	488	321	413	396
	2650	441	355	402	443
	1900	500	341	429	401
	2650	530	330	440	427.3
	2650	530	330	440	427.3
	3400	580	347	475	468
600		394	284	345	312.2
600		394	284	345	312.2
	2650	499	350	432	419
	8650	787	474	646	649
	4150	590	364	488	466
	8650	768	469	633	639
	5150	638	370	517	510
	8650	787	474	646	649
	8650	768	469	634	639
	16900	1050	599	847	885
	10400	836	481	676	705

	12150	902	547	742	771
	6150	657	447	562	552
	7400	734	511	633	635
	6150	660	446	564	556
	8650	768	452	625	681
2600		354	262	313	272
100		401	291	351	334.3
2600		365	250	314	281.3
2400		430	298	371	350.8
850		396	310	358	323.7
850		408	289	354	335.2
	400	421	310	371	332
2600		365	250	314	281.3
	400	430	298	371	350.8
100		418	329	378	335.4
100		403	283	349	327.2
100		425	279	360	346.3
	1900	507	334	429	419
	2650	523	351	446	434
100		405	257	338	321
3100		340	244	297	259.8
3100		342	243	298	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
	1400	460	330	402	372
1100		379	271	331	295.1
100		416	287	358	340.4
1100		372	280	331	300.9
3100		340	244	297	259.8
850		381	299	344	315
2100		361	262	316	307
600		403	272	344	333.9
3100		342	243	298	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
2850		352	258	310	270
3100		342	243	298	261.7
1350		374	286	334	315.6
1350		388	271	335	336.4
3100		331	240	290	268
3350		330	239	289	266
850		401	289	351	328.2
1350		391	275	339	339.6
	900	449	319	390	372
	900	430	342	390	339.6
	1900	484	336	417	407

900	435	344	394	343.6
900	517	351	442	422
3400	520	391	462	416
1900	447	372	413	354

City	CO2-Hwy	CO2-City	CO2-Calculated	CO2-Hwy	CO2-Comb	CO2-PHEV 240V	Char 120V	Char PHEV	TotaCity PHEV
	232	287.6	431.8	318.9	381				
	171.2	219.9	339.9	244.5	297				
	220	291.5	442.5	295.6	376.4				
	239	286.3	442	316	385.3				
	199.8	251.5	373.3	303.6	341.9				
	218.7	288.6	436.9	296.8	373.9				
	202.1	267.2	397.1	276.4	342.8				
	199.8	251.5	373.3	303.6	341.9				
	218.7	288.6	436.9	296.8	373.9				
	218.7	288.6	436.9	296.8	373.9				
	202.1	267.2	397.1	276.4	342.8				
	189	240.2	360	272	320.4				
	218.7	288.6	436.9	296.8	373.9				
	233	315.8	481.7	326	411.6				
	238.7	323.8	498	320.9	418.3				
	238.7	323.9	498	320.9	418.4				
	232	329.6	515.1	313.1	424.2				
	238.7	323.9	498	320.9	418.4				
	262	364	554.1	344.7	459.9				
	346	463.2	675	430	564.8				
	238	300.7	444	333	394				
	230	300.4	449.6	314.3	388.7				
	296.5	386.9	573.1	411.5	500.4				
	260	362.3	541	369	463.6				
	296	389.5	562.3	379.3	480				
	307	392.8	558	398	486				
	248	329.4	488	321	412.8				
	266	363.4	440.6	355	402.1				
	248	329.4	488	321	412.8				
	266	363.4	440.6	355	402.1				
	256	335.8	500.4	340.8	428.6				
	251.6	348.2	530.4	329.7	440.1				
	251.6	348.2	530.4	329.7	440.1				
	267	377.6	580.3	347.3	475.4				
	209.9	266.2	394.5	284.4	345				
	209.9	266.2	394.5	284.4	345				
	259	347	498.9	350.4	432.1				
	361	519.4	787	474	646.2				
	265	375.6	590	364	488.3				
	359	513	768	469	633.4				
	288	410.1	638	370	517.4				
	361	519.4	787	474	646.2				
	359	513	768	469	634				
	495	709.5	1050.2	598.8	847.1				
	353	546.6	836	481	676.3				



418	612.2	902	547	742.2
349	460.6	657	447	562.5
370	515.8	734	511	633
348	462.4	660	446	563.7
391	550.5	768	452	625
184	232.4	354.3	261.8	312.7
211.2	278.9	401	290.6	351.3
175.3	233.6	365.3	250.1	313.5
214.6	289.5	430.3	298	370.8
227.6	280.5	396.3	310.3	358.2
207.2	277.6	407.6	288.8	354.1
220.9	282	421	310	371
175.3	233.6	365.3	250.1	313.5
214.6	289.5	430.3	298	370.8
235.6	290.5	418.2	329.4	378.2
207.7	273.4	402.8	282.7	348.8
202.5	281.6	425.2	279.3	359.5
253	344.3	506.7	333.8	428.9
265	358	523	351.1	445.6
213	272.4	404.7	256.6	338.1
171.2	219.9	339.9	244.5	297
170	220.5	342.1	242.9	297.5
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
240	312.6	459.5	330.5	401.5
203.2	253.7	379.2	271.3	330.6
215.5	284.2	415.9	287	357.9
196.7	254	372	280.4	330.8
171.2	219.9	339.9	244.5	297
214	269.6	381.3	298.8	344.2
192	255.2	360.5	262	316.2
197.2	272.4	403.3	271.8	344.1
170	220.5	342.1	242.9	297.5
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
181	230	351.9	257.7	309.5
170	220.5	342.1	242.9	297.5
208.9	267.6	373.9	285.6	334.2
199.4	274.8	388	270.9	335.3
179	228	331	240	290
162	219.2	330	239	289
217.8	278.5	400.9	289.4	350.7
206.8	279.8	391.3	275	339
238	311.7	449	319	390.5
244.4	296.8	429.9	341.3	390
248	335.5	484	336	417.4

246	299.7	434.6	343.5	394
248	343.7	517	351	442.3
281	355.3	520.1	390.6	461.8
267	314.8	446.9	371.8	413.1

City	EPA_Fuel_Consumption (mpg)	Distance (miles)	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT	EPA_INCR
N	4.2	4.2					
N	2.9	2.9					
N	4.2	4.2					
N	4.2	4.2					
N	3.8	3.8					
N	4.2	4.2					
N	3.8	3.8					
N	3.8	3.8					
N	4.2	4.2					
N	4.2	4.2					
N	3.8	3.8					
N	3.6	3.6					
N	4.2	4.2					
N	4.5	4.5					
N	4.8	4.8					
N	4.8	4.8					
N	4.8	4.8					
N	4.8	4.8					
N	5.3	5.3					
N	6.2	6.2					
N	4.3	4.3					
N	4.3	4.3					
N	5.6	5.6					
N	4.5	4.5					
N	5.6	5.6					
N	5.6	5.6					
N	4.8	4.8					
N	5	5					
N	4.8	4.8					
N	5	5					
N	4.8	4.8					
N	5	5					
N	5	5					
N	5.3	5.3					
N	3.8	3.8					
N	3.8	3.8					
N	5	5					
N	7.1	7.1					
N	5.6	5.6					
N	7.1	7.1					
N	5.9	5.9					
N	7.1	7.1					
N	7.1	7.1					
N	10	10					
N	7.7	7.7					

N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8

N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8









[illegible]

[illegible]

Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 8/17/2012 8:40:57 PM  
**Subject:** VW Geroup - MY2013 Bentley Decision Information

Hello Jim

Today I submitted decision information for Flex-fuel MY 2013 Bentley Continental GTC and GT with 6.0L turbo engine, for test group DBEXV06.04UC. A total of 4 configurations were submitted (2 weight classes x 2 for FFV tests = 4 configs). New exhaust tests for both EDV and FEDV with both gasoline and ethanol fuels are submitted.

Please note this is a carryover from the MY 11 BBEXv06.0501 test group, but with updated engine controller and an 8 speed transmission.

Please advise of your decision as soon as you have a chance, as this will help us with scheduling. Also as always please call me if you have any questions about this.

Thanks!

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

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Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 8/20/2012 4:04:58 PM  
**Subject:** VW Group - Confirmatory Test Decision Information for Audi 2.0TFSI FFV

Hello Jim,

I have submitted all tests and Decision Information files for the follow (new) 2013 Audi FFV test group DADXJ02.0FUB. The Audi Q5 SUV will be added to the test group later, hence the "J" test group name. Only E85 exhaust tests and E10 EVAP tests have been submitted because we are using carry-across gasoline tests from the existing gasoline-only test group DADXV02.03UB. The related VID's are as follows:

DFUB-BAA, Configuration 1 – EDV - Audi A4 Allroad quattro

DFUD-BAQ, Configuration 2 – FEDV - Audi A4 quattro / A5 quattro

DFUB-BAQ, Configuration 3 – FEDV / EVAP - Audi A5 Cabrio quattro

We are under a time crunch to certify and produce fuel economy labels for these, so your earliest attention would be greatly appreciated.

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** "Harris, Dale (EEO)" [Dale.Harris@vw.com]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; liver.schmidt@vw.com; CN=Roberts French/OU=AA/O=USEPA/C=US@EPA; CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA; CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Mon 8/20/2012 4:38:01 PM  
**Subject:** RE: 2013 VW greenhouse gas PreMY report questions & potential errors - VW revision 7/9/2012 - [EPA calcs now agree with your revised calculations]  
[@vw.com](mailto:Dale.Harris@vw.com)  
[Dale.Harris@vw.com](mailto:Dale.Harris@vw.com)  
[Leonard.Kata@vw.com](mailto:Leonard.Kata@vw.com)  
[Oliver.Schmidt@vw.com](mailto:Oliver.Schmidt@vw.com)  
<http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>  
[Dale.Harris@vw.com](mailto:Dale.Harris@vw.com)  
(embedded image)

Dale,

Thanks for making the corrections, responding to my email questions, etc.

I double checked your revised values and my calculations now agree with your calculations (minus Porsche and Bugatti). In addition, I didn't check your detailed A/C efficiency or A/C leakage projected credits for 2013-2015 model year.

Regards

**From:** "Harris, Dale (EEO)" <Dale.Harris@vw.com>  
**To:** David Good/AA/USEPA/US@EPA  
**Cc:** "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
**Date:** 07/09/2012 01:45 PM  
**Subject:** RE: 2013 VW greenhouse gas PreMY report questions & potential errors - Revised 6/18/2012 - [more EPA followup questions]

Rob

Attached are documents and responses to the several issues identified below. Please let me know if there are any additional questions. Thanks!!!

1. 2013 Car fleet average template: The standard is listed as 258 gpm, which doesn't agree with the standard shown on the standards calculator (257 gpm). The AB&T template shows 258gpm.

Changed fleet standards to align with EPA calculator at 257 gpm. Attached file '2013 Pre MY PC.pdf'.

2. 2014 Car fleet average template: The total A/C credits (290,345 Mg) doesn't equal the sum of the A/C

leakage credits (252,367) and the A/C efficiency credits (328,322). It appears that you have somehow altered the calculations in the EPA fleet average template. As a result, the Total Fleet Average CREE (credit/debit) looks to be in error (-10,762 debits shown instead of 279,835 credits which I calculated).

Corrected an error in the EPA 2014 fleet average template where AC Credit values were not being summed properly. Attached file '2014 Pre MY PC.pdf'.

5. 2015 Car fleet average template: Similar to item 3 above, the total A/C credits (303,571 Mg) doesn't equal the sum of the A/C leakage credits (260,549) and the A/C efficiency credits (346,593). It appears that you have somehow altered the calculations in the EPA fleet average template. As a result, the Total Fleet Average CREE (credit/debit) looks to be in error (-358,487 debits shown instead of -54,915 debits which I calculated---and which is shown on the AB&T template).

Corrected an error in the EPA 2014 fleet average template where AC Credit values were not being summed properly. Attached file '2015 Pre MY PC.pdf'.

6. 2015 Truck fleet average template: The standard is listed as 291 gpm, which doesn't agree with the standard shown on the standards calculator (294 gpm). The AB&T template shows a standard of 291gpm. Also, similar to item 3 above, the total A/C credits (63,616 Mg) doesn't equal the sum of the A/C leakage credits (50,339) and the A/C efficiency credits (76,893). It appears that you have somehow altered the calculations in the EPA fleet average template. As a result, the Total Fleet Average CREE (credit/debit) looks to be in error -261,964 debits shown instead of -149,511 debits which I calculated.

Changed fleet standards to align with EPA calculator at 294 gpm. Attached file '2015 Pre MY LDT.pdf'.

Corrected an error in the EPA 2015 fleet average template where AC Credit values were not being summed properly. Attached file '2015 Pre MY LDT.pdf'.

7. AB&T Template: Thanks for entering the 2013, 2014 & 2015 summary information into one AB&T spreadsheet----unfortunately you deleted the 2009-2011 credit/debit summary. If possible, please add the 2009-2011 credit/debits back into the AB&T spreadsheet. Also if possible, please use the values from your 2009-2011 Early Credit report which you sent to Rob French---with a note that that's where they came from and whether they are preliminary values or final values which you and Rob have agreed upon. [Both VW and EPA will need to keep good records in this spreadsheet as it gets updated each year----because it will be a while before EPA will begin tracking this information in Verify. [If you want to send me the AB&T spreadsheet (in Excel—not a pdf), I'll be glad to enter VW's 2009-2011 car & truck credits which Rob French gave me. Then I'll send it back to you for final editing.]

Added MY2009 – 2011 summary data into the MY2013 -2015 AB&T Template as requested. The data values from MY2009 – 2011 are from the 2009 – 2011 Early Credit Report sent to Rob French. The values are indeed final values for the given model years 2009 - 2011. Attached file '2009 – 2015 Pre MYAB&T.xls'.

Regards,  
Dale Harris  
Certification Specialist

VOLKSWAGEN Group of America, Inc.  
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AuburnHills Michigan 48326  
United States of America



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E: Dale.Harris@vw.com

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Friday, July 06, 2012 7:50 PM  
To: Harris, Dale (EEO)  
Cc: Kata, Leonard (EEO); Schmidt, Oliver (EEO); Roberts French; Tom Anderson; Linc Wehrly  
Subject: 2013 VW greenhouse gas PreMY report questions & potential errors - Revised 6/18/2012 - [more EPA followup questions]

Dale,

Thanks for your response to my questions about the VW 2013 greenhouse gas Pre-Model Year Report. I reviewed your revised templates and still have a few follow-up questions. Here are my comments & questions:

1. 2013 Car fleet average template: The standard is listed as 258 gpm, which doesn't agree with the standard shown on the standards calculator (257 gpm). The AB&T template shows 258gpm.

Please advise.

2. 2013 Truck fleet average template: Looks OK to me & agrees with the data shown on the AB&T template.

3. 2014 Car fleet average template: The total A/C credits (290,345 Mg) doesn't equal the sum of the A/C leakage credits (252,367) and the A/C efficiency credits (328,322). It appears that you have somehow altered the calculations in the EPA fleet average template. As a result, the Total Fleet Average CREE (credit/debit) looks to be in error (-10,762 debits shown instead of 279,835 credits which I calculated).

The AB&T template shows 252,367 A/C leakage credits and 328,322 A/C efficiency credits. The AB&T template shows the Total Fleet Average CREE value of 279,583. It looks like you may have entered unrounded values for the standards (or compliance level---but I can't tell since you included a pdf copy, only. [I'm not too concerned about these rounding differences----especially if you want to use unrounded (more accurate) values----however the final GHG report data which you submit to EPA's Verify data base will be rounded to the nearest whole gpm value.] ).

Please advise.

4. 2014 Truck fleet average template: Looks OK to me but doesn't quite agree with the AB&T template. ).

The fleet average template shows -121,911 debits for the fleet average CREE (w/o A/C credits) while the AB&T template shows -121,570 debits. The fleet average template shows a Total Fleet Average CREE value of 10,223 Mg credits (including A/C credits) while the AB&T template shows 10,564 credits. Again this looks like a minor rounding error to me.

Please advise.

5. 2015 Car fleet average template: Similar to item 3 above, the total A/C credits (303,571 Mg) doesn't equal the sum of the A/C leakage credits (260,549) and the A/C efficiency credits (346,593). It appears that you have somehow altered the calculations in the EPA fleet average template. As a result, the Total Fleet Average CREE (credit/debit) looks to be in error (-358,487 debits shown instead of -54,915 debits which I calculated---and which is shown on the AB&T template).

Please advise.

6. 2016 Truck fleet average template: The standard is listed as 291 gpm, which doesn't agree with the standard shown on the standards calculator (294 gpm). The AB&T template shows a standard of 291gpm. Also, similar to item 3 above, the total A/C credits (63,616 Mg) doesn't equal the sum of the A/C leakage credits (50,339) and the A/C efficiency credits (76,893). It appears that you have somehow altered the calculations in the EPA fleet average template. As a result, the Total Fleet Average CREE (credit/debit) looks to be in error -261,964 debits shown instead of -149,511 debits which I calculated.

The AB&T template shows a 291 gpm standard which doesn't agree with the 294 value shown on the standards calculator. The AB&T template shows -325,580 debits for the fleet average CREE (w/o A/C credits) while I calculate -276,473 debits using a standard of 294 gpm. The AB&T template shows a Total Fleet Average CREE value of -198,348 Mg debits (including A/C credits) while I calculate -149,511 Mg debits).

Please advise.

7. AB&T Template: Thanks for entering the 2013, 2014 & 2015 summary information into one AB&T spreadsheet----unfortunately you deleted the 2009-2011 credit/debit summary. If possible, please add the 2009-2011 credit/debits back into the AB&T spreadsheet. Also if possible, please use the values from your 2009-2011 Early Credit report which you sent to Rob French---with a note that that's where they came from and whether they are preliminary values or final values which you and Rob have agreed upon. [Both VW and EPA will need to keep good records in this spreadsheet as it gets updated each year----because it will be a while before EPA will begin tracking this information in Verify. [If you want to send me the AB&T spreadsheet (in Excel—not a pdf), I'll be glad to enter VW's 2009-2011 car & truck credits which Rob French gave me. Then I'll send it back to you for final editing.]

Please advise.

8. Potential Merger of VW & Porsche: Thanks for the information about the status of the VW's acquisition of Porsche. My supervisor, Linc Wehrly, said he heard in the news yesterday that VW has plans to buy controlling interest in Porsche which is scheduled to become effective on August 1, 2012 or so. My reading of the GHG & CAFE regulations is that both defer to NHTSA Successor & Predecessor regulations. For example the provisions of 49 CFR 534.5 (b) read "A manufacturer is considered to be within a control relationship for an entire model year if and only if it is within that relationship on September 30 of the calendar year in which the model year ends." My understanding is that the basis for a "control relationship" can be 1) control of the design, calibration, etc., of the vehicle(s) or 2) corporate ownership control (e.g. owning more than 50% of a company). Call me at 734-214-4450 if you would like to discuss this a little more.

It might be worthwhile to have a meeting on all the impacts of this, including how to handle EPA certification, FE labeling, IUVP, CAFE, Greenhouse gas reporting, certificate language, etc after you and Porsche have had time to work out a plan---or at least you should document your plans in a letter to EPA.

Thanks

Dave

"Harris, Dale (EEO)" ---06/18/2012 10:07:25 AM---Dave Attached are updated documents that address the issues identified within you most recent email.

From: "Harris, Dale (EEO)" <Dale.Harris@vw.com>

To: David Good/AA/USEPA/US@EPA

Cc: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>, "Schmidt, Oliver (EEO)" <Oliver.Schmidt@vw.com>

Date: 06/18/2012 10:07 AM

Subject: RE: 2013 light-duty Greenhouse gas - 2013 PreMY report questions & potential errors - Revised 6/18/2012

Dave

Attached are updated documents that address the issues identified within your most recent email. In addition I have included responses to each of the identified issues in red below. Furthermore a statement has been included that addresses the uncertainty associated with Porsche. Please let me know if there are any additional questions. Thanks!

1. Potential error in your fleet average calculations: Using the projected CREE fleet average estimates and CREE standards listed in your (attached) 2013 Pre-MY report spreadsheet, I come up with slightly different results for the total "Model Year Credits (Debits)" fields for car and trucks for 2012-2015 model years. For example, my calculations for 2013-2015 model year result in the following credit (Megagram) values:

Category D. Good CREE Calcs VW CREE values Comments

2013 Pass Car (730,335) (778,903)

2013 Light Truck 87,527 87,527

agrees with VW

2014 Pass Car (79,674) (91,543)

2014 Light Truck (16,902) (17,244)

2015 Pass Car (424,806) (395,074)

2015 Light Truck (272,380) (275,812)

My calculations, for example, for 2013 cars are  $[(258 - 269)(550,837)(195,264)/1,000,000] - 404,242 \text{ (A/C credits)} = 778,903$  credits. It looks like your calculations are not rounding the CREE standards and fleet average CREE values to the nearest whole gram/mile, as required by EPA regulations.

Please advise.

Attached are updated documents where CREE Fleet Average estimates have been corrected by using the appropriate rounding technique.

## Ex. 4 - CBI

Please advise.

EPA Calculator documents have been updated to correct errors in projected planning volumes. Planning volumes are now aligned throughout the report MY 2013 – 2015.

3. Bugatti: Bugatti models appear to be missing in your 2013-2015 templates.

Please advise  
Bugatti planning volumes not available.

4. Three AB&T Spreadsheets: Your report contains three AB&T spreadsheets. None of them include projections for 2014 or 2015 model year credits. Please combine the three spreadsheets into one AB&T spreadsheet which includes a listing for 2014 and 2015 credits.

Please advise.  
AB&T spreadsheet has been updated with MY 2013 – 2015 appearing on 1 spreadsheet as requested.

5. A/C Leakage and Efficiency Credits: Your 2013 Pre-MY report doesn't contain any details of how the A/C credits were generated for each model. Please provide a little more detail about how the A/C leakage and A/C efficiency credits will be generated for 2012 and 2013 model year vehicles, and (if possible) 2014 and 2015 model year vehicles---similar to the level of detail provided in the EPA templates available at <http://www.epa.gov/otaq/regs/ld-hwy/greenhouse/ld-ghg.htm>.

Please advise.  
Support documentation has been provided that demonstrates how credits were generated for each model.

6. Possible Merger of VW and Porsche: Over the past year, there have been some articles in the press about a potential merger of VW & Porsche. If possible, please provide a brief summary of the status of that possible merger and any potential effects on VW's 2013 GHG compliance plans.

"On September 8, 2011, Volkswagen AG announced that the planned merger with Porsche Automobile Holding SE (Porsche SE) cannot be implemented within the time frame laid down in the Comprehensive Agreement. The decision was reached by the Board of Management of Volkswagen AG following discussions with Porsche SE. Nevertheless, all parties remain committed to the goal of creating an integrated automotive group with Porsche and are convinced that they will succeed in doing so.

The existing legal hurdles, and particularly those resulting from the ongoing proceedings and actions against Porsche SE in Germany and the USA due to alleged market manipulation, made it impossible from Volkswagen's perspective to quantify the economic risks and hence to arrive at a valuation for Porsche SE that could be used to determine the exchange ratio.

Over the past months, Volkswagen AG and Porsche SE have conducted in-depth examinations of whether there are other possibilities, in addition to the put/call options contained in the Comprehensive Agreement, that can be implemented by all parties involved in order to achieve the goal of creating the integrated automotive group with Porsche [AG, the operating business,] on economically feasible terms [earlier than 2014]. These examinations are still ongoing."

Regards,  
Dale Harris  
Certification Specialist

VOLKSWAGEN Group of America, Inc.  
Engineering and Environmental Office (EEO)  
3800 Hamlin  
Auburn Hills Michigan 48326

United States of America

P: +1 248 754-4218

E: Dale.Harris@vw.com

[attachment "winmail.dat" deleted by David Good/AA/USEPA/US] [attachment "message\_body.rtf" deleted by David Good/AA/USEPA/US] [attachment "2013 Pre MY Report.pdf" deleted by David Good/AA/USEPA/US] [attachment "2014 Pre MY PC.pdf" deleted by David Good/AA/USEPA/US] [attachment "2015 Pre MY PC.pdf" deleted by David Good/AA/USEPA/US] [attachment "2009- 2015 Pre MY AB&T.xls" deleted by David Good/AA/USEPA/US] [attachment "2015 Pre MY LDT.pdf" deleted by David Good/AA/USEPA/US] [attachment "2013 Pre MY PC.pdf" deleted by David Good/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 8/21/2012 3:29:45 PM  
**Subject:** FW: Confirmatory Test Waived (BY77623/13 / 1)

Hello Jim,

We waivers for 3 of the 4 configurations here (thank you)! Can you confirm status for configuration #3?

Thanks,  
Mike

-----Original Message-----

From: no-reply@epa.gov [mailto:no-reply@epa.gov]  
Sent: Tuesday, August 21, 2012 11:12 AM  
To: Rodgers, William (EEO); Giles, Michael (EEO); Hart, Robert (VWoA); Thomas, Richard (EEO); VWoA EEO Government  
Subject: Confirmatory Test Waived (BY77623/13 / 1)

The following is a courtesy copy of status message for a Verify submission. Any references made to links refer to links which will appear in the CDX Inbox message.

Confirmatory Test for the following Vehicle has been Waived:

Manufacturer: BEX  
Vehicle ID: BY77623/13  
Vehicle Configuration: 1

The Verify submission this message relates to has the following values:

Vehicle ID: BY77623/13

Vehicle Configuration #: 1

Test Group Name: DBEXV06.04UC

The following transaction identifier has been assigned to this request:

\_4f93cd18-f551-4a99-8e45-ed343d011a56

Please do not reply to this message.

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 8/21/2012 3:38:55 PM  
**Subject:** Re: FW: Confirmatory Test Waived (BY77623/13 / 1)

I didn't realize there was a fourth config. It rolled off the page onto page 2.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/21/2012 11:30 AM  
Subject: FW: Confirmatory Test Waived (BY77623/13 / 1)

Hello Jim,

We waivers for 3 of the 4 configurations here (thank you)! Can you confirm status for configuration #3?

Thanks,  
Mike

-----Original Message-----

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Test Group Name: DBEXV06.04UC

The following transaction identifier has been assigned to this request:

\_4f93cd18-f551-4a99-8e45-ed343d011a56

Please do not reply to this message.



**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Wed 8/22/2012 6:22:55 PM  
**Subject:** 2013 Fuel Economy Guide FFV Placeholder  
[winmail.dat](#)  
[2013 EPA placeholder.xlsx](#)

Hello Dave;

Please see the attached spreadsheet with the fuel economy guide placeholder for 2013 Audi and Bentley FFV models. If you have any questions please feel free to call.

Thanks,  
Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

2013 EPA placeholder.xlsx

Hello Dave;

Please see the attached spreadsheet with the fuel economy guide placeholder for 2013 Audi and Bentley FFV models. If you have any questions please feel free to call.

Thanks,

Richard

*Richard E. Thomas*  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

Audi Model Name	Vehicle Class, Body Type Pass/Cargo	Trans Type	No. of cyl.	Engine	Fuel Type	Miles Per Gallon City Hwy		Driving Range (miles)
* A4 quattro	Compact, 4dr 91/12	SA-8	4	2.0L	E85	14	20	270
					Gasoline	20	29	406
* A5 quattro	Subcompact, 2dr 84/12	SA-8	4	2.0L	E85	14	20	270
					Gasoline	20	29	406
* A5 Cabriolet quattro	Subcompact, 2dr 81/10	SA-8	4	2.0L	E85	14	20	270
					Gasoline	20	29	406
* allroad quattro	Small Wagon, 4dr 90/28	SA-8	4	2.0L	E85	13	18	253
					Gasoline	20	27	389
Q5	Small Sport Utility Vehicle (SUVS), 4WD	SA-8	4	2.0L	E85	NA	NA	NA
					Gasoline	NA	NA	NA

\*

please note; these models may already be entered into Verify before Aug 29th.

BENTLEY Model Name	Vehicle Class, Body Type Pass/Cargo	Trans Type	No. of cyl.	Engine	Fuel Type	Miles Per Gallon City Hwy		Driving Range (miles)
Continental GT	Subcompact, 2dr 89/11	SA-8	12	6.0L	E85	NA	NA	
					Gasoline	NA	NA	
Continental GTC	Subcompact, 2dr 86/7	SA-8	12	6.0L	E85	NA	NA	
					Gasoline	NA	NA	

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Wed 8/22/2012 7:43:47 PM  
**Subject:** VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB

Hello Jim,

I have submitted the Initial Application and confirmatory test Decision Information for the following 2013 Audi flex-fuel Test Group/Evaporative Family. All tests have been submitted including manufacturer confirmatory tests. This test group was recently selected for EPA confirmatory EVAP testing.

As previously discussed, this flex-fuel test group uses carry across gasoline test data from the test group DADXV02.03UB which has been verified to have identical engine and transmission programming for gasoline operation.

We are requesting a conditional certificate be issue as soon as possible due to a very tight port release deadline as early as August 31st.

Test Group: DADXJ02.0FUB

Evap. Family: DADXR0140B8F

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** michael.giles@vw.com[]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Wed 8/22/2012 7:53:52 PM  
**Subject:** Request for US06 Drive Trace

Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr.	Vehicle ID	Test Date	Manuf. Test Number
Audi	VW465 790007/09	12/09/11	CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

**To:** michael.giles@vw.com[]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Wed 8/22/2012 7:53:52 PM  
**Subject:** Request for US06 Drive Trace

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Audi	VW465 790007/09	12/09/11	CADX10019487

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If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Wed 8/22/2012 8:44:39 PM  
**Subject:** re: 2013 FE Guide - Errors (if any) in Verify as of Aug 22, 2012; last day to correct errors for the Printed Guide is Aug 29, 2012  
[VW Group 2013 FE Guide-all-rel-dates-no-sales-8-22-2012.xlsx](#)

Richard,

re: 2013 FE Guide - Errors (if any) in Verify as of Aug 22, 2012; last day to correct errors for the Printed Guide is Aug 29, 2012

Thanks for your help correcting errors over the last month. Some manufacturers have been correcting errors and have asked me to send them an up-to-date query of the 2013 FE Labels in Verify.

Attached are the data in Verify as of about 1:30 PM on Wednesday, Aug 22, 2012. The error messages (if any) are pretty much as flagged by our macro---I didn't have time to double check the data.

Call or email me if you have questions.

Thanks

Dave



EPA com	VERIFY cc	Model Yr (Mfr Name	Division (	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
Diesel;		2013 Audi	Audi	A3	ADX	73	2.0 4
		2013 Audi	Audi	A3	ADX	59	2.0 4
		2013 Audi	Audi	A3	ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013 Audi	Audi	A4	ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	39	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013 Audi	Audi	A6	ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled; Y		2013 Audi	Audi	A8	ADX	128	3.0 6
		2013 Audi	Audi	A8	ADX	98	4.0 8
Relabeled; Y		2013 Audi	Audi	A8L	ADX	129	3.0 6
		2013 Audi	Audi	A8L	ADX	97	4.0 8
		2013 Audi	Audi	A8L	ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013 Audi	Audi	Q5	ADX	91	2.0 4
Hybrid;		2013 Audi	Audi	Q5 Hybrid	ADX	95	2.0 4
Diesel;		2013 Audi	Audi	Q7	ADX	53	3.0 6
Error in RoY		2013 Audi	Audi	Q7	ADX	61	3.0 6
		2013 Audi	Audi	RS5	ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
		2013 Audi	Audi	S4	ADX	42	3.0 6
		2013 Audi	Audi	S4	ADX	45	3.0 6
		2013 Audi	Audi	S5	ADX	43	3.0 6
		2013 Audi	Audi	S5	ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013 Audi	Audi	S6	ADX	48	4.0 8
		2013 Audi	Audi	S7	ADX	47	4.0 8
		2013 Audi	Audi	S8	ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe	ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013 Audi	Audi	TTRS Coupe	ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental BEX	ing Spur	110	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX		108	4.0 8
		2013 Bentley	Bentley Motors	Continental BEX		113	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX		107	4.0 8
		2013 Bentley	Bentley Motors	Continental BEX		111	6.0 12
Error in coiY		2013 Bentley	Bentley Motors	Continental BEX		112	6.0 12
		2013 Bentley	Bentley Motors	Mulsanne	BEX	96	6.8 8
		2013 Bugatti	Bugatti	Veyron	BGT	88	8.0 16
Error in coiY		2013 Lamborghini	Lamborghini	Aventador	NLX	92	6.5 12
		2013 Lamborghini	Lamborghini	Aventador	Roadster	93	6.5 12
		2013 Lamborghini	Lamborghini	Gallardo	Coupe	30	5.2 10

Error - saleY	2013	Lamborghini	Lamborghini	Gallardo CNLX	32	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo Spider	31	5.2	10
Error - saleY	2013	Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel;	2013	Volkswagen	Volkswagen	BEETLE VWX	94	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	19	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE VWX	84	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	89	2.0	4
Error in coiY	2013	Volkswagen	Volkswagen	BEETLE VWX	17	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE VWX	27	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	20	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	85	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	90	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	18	2.5	5
	2013	Volkswagen	Volkswagen	CC VWX	1	2.0	4
	2013	Volkswagen	Volkswagen	CC VWX	4	2.0	4
	2013	Volkswagen	Volkswagen	CC VWX	2	3.6	6
	2013	Volkswagen	Volkswagen	CC 4MOTION VWX	3	3.6	6
	2013	Volkswagen	Volkswagen	Eos VWX	21	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF VWX	72	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF VWX	81	2.0	4
	2013	Volkswagen	Volkswagen	GOLF VWX	16	2.5	5
	2013	Volkswagen	Volkswagen	GOLF VWX	26	2.5	5
	2013	Volkswagen	Volkswagen	Golf R VWX	57	2.0	4
	2013	Volkswagen	Volkswagen	GTI VWX	22	2.0	4
	2013	Volkswagen	Volkswagen	GTI VWX	23	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta VWX	71	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	50	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	86	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	87	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta VWX	80	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	51	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	15	2.5	5
	2013	Volkswagen	Volkswagen	Jetta VWX	25	2.5	5
Hybrid; ErrY	2013	Volkswagen	Volkswagen	Jetta Hybrid VWX	100	1.4	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	74	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	79	2.0	4
	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	14	2.5	5
	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	24	2.5	5
Diesel;	2013	Volkswagen	Volkswagen	Passat VWX	62	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Passat VWX	64	2.0	4
	2013	Volkswagen	Volkswagen	Passat VWX	83	2.5	5
	2013	Volkswagen	Volkswagen	Passat VWX	82	2.5	5
	2013	Volkswagen	Volkswagen	Passat VWX	63	3.6	6
Error in coiY	2013	Volkswagen	Volkswagen	TIGUAN VWX	68	2.0	4
	2013	Volkswagen	Volkswagen	TIGUAN VWX	56	2.0	4
Error in coiY	2013	Volkswagen	Volkswagen	TIGUAN 4I VWX	55	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Touareg VWX	54	3.0	6
	2013	Volkswagen	Volkswagen	Touareg VWX	78	3.6	6
Hybrid;	2013	Volkswagen	Volkswagen	Touareg Hybrid VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S	30	42	34				39.0935	59.3437	46.1856
Auto(AM-S6)	21	28	24				26.6	38.2	30.8102
Manual(M6)	21	30	24				25.3	40.3	30.3902
Auto(AM-S	21	28	24				27.2	37.1	30.9119
Auto(AV-Si	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-Si	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21	ded.) 600.314-08 states label values must not change for entire model year, except for 600-507(a) and 600-314-08(					
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8)	18	28	21	ded.) 600.314-08 states label values must not change for entire model year, except for 600-507(a) and 600-314-08(					
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	24	30	26				30.4	39.9	34.048
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(AM-S	16	23	18				19.1	30	22.8332
Auto(AM-S7)	16	22	18				19.2	28.9	22.6159
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	26	21				22.1	34.7	26.4165
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Manual(M6)	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	11	18	13				12.9	21.8	15.8033
Auto(AM-S7)	8	15	10				10	17.9	12.4782
Auto(AM-S	11	18	13				12.6	25.2	16.2581
Auto(AM-S7)	10	16	12				11.5	21.2	14.4817
Auto(AM-S6)	13	20	16				16.1	25.4	19.276

re not offered for sale in the US	12	20	16	16	25.4	19.197
Manual(M6)	12	20	14	13	22.6	16.0722
Auto(AM-S6)	29	39	32	37.3	55.3	43.7011
Auto(AM-S6)	22	30	25	26.5	42.0656	31.7942
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M5)	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S6)	21	29	24	26.8	40.2092	31.532
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S6)	22	31	25	26.977	42.4936	32.2814
Manual(M6)	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S6)	22	30	25	27.5	41.5	32.4219
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Manual(M6)	19	27	22	23.9	37.1	28.456
Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229
Manual(M6)	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M5)	24	34	28	28.8	46.2	34.6771
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Manual(M6)	22	33	26	26.5556	44.9945	32.56
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	42	49	45	57.2	66.2	60.9274
Auto(AM-S6)	29	39	33	37.6	56.2	44.1798
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	30	40	34	37.9	56.8	44.5744
Manual(M6)	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M5)	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S6)	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

2 value, we calculate 393.6; Please revise. Verify as needed.

City	Highway	City	Highway	Unrd Comb Unr	Guzzler?	Air Aspir	I Air Aspir	A Trans	Trans Des	Trans, Otr	# Gears
29.8946	41.5209	34.2046				TC	Turbochar	AMS	Automate		6
21.3388	27.7919	23.8286				TC	Turbochar	AMS	Automated Manual-	Selectable	(e.g. Au
20.8146	29.9953	24.1394				TC	Turbochar	Ad	Manual		6
20.891	28.1035	23.6187				TC	Turbochar	AMS	Automate		6
23.6355	30.6684	26.3554				TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049				TC	Turbochar	Ad	Manual		6
23.6355	30.6684	26.3554				TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508				TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508				TC	Turbochar	Ad	Semi-Automatic		8
22.2425	32.0861	25.8049				TC	Turbochar	Ad	Manual		6
24.5044	32.5529	27.5721				TC	Turbochar	SCV	Selectable Continuously Variable		(e.g. C
20.3576	29.8271	23.7508				TC	Turbochar	Ad	Semi-Automatic		8
18.3949	27.2332	21.5408				SC	Superchar	Ad	Semi-Automatic		8
17.8058	27.5484	21.1758				SC	Superchar	SA	Semi-Auto		8
e)(4) reasons: Please revise release date to the effective date when vehicles were relabelled; Error in combined unr	17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
17.2616	28.4347	20.9695				TC	Turbochar	Ad	Semi-Automatic		8
e)(4) reasons: Please revise release date to the effective date when vehicles were relabelled; Error in combined unr	17.8058	27.5484	21.1758			SC	Superchar	SA	Semi-Auto		8
16.0273	25.8053	19.3219				TC	Turbochar	Ad	Semi-Automatic		8
13.1387	20.6025	15.6978	G			NA	Naturally Aspirated		Semi-Automatic		8
19.9584	26.6824	22.5112				TC	Turbochar	Ad	Semi-Automatic		8
19.7289	28.2351	22.823				TC	Turbochar	SA	Semi-Auto		8
24.0075	29.7936	26.3065				TC	Turbochar	Ad	Semi-Automatic		8
18.74	27.62	21.9099				TC	Turbochar	Ad	Semi-Automatic		8
15.522	21.5458	17.7559				SC	Superchar	SA	Semi-Auto		8
15.7409	23.3075	18.4339				NA	Naturally AMS		Automate		7
15.8793	22.1836	18.2078				NA	Naturally AMS	Ad	Automated Manual-	Selectable	(e.g. Au
18.117	27.558	21.419				SC	Superchar	AMS	Automated Manual-	Selectable	(e.g. Au
17.0438	26.023	20.1767				SC	Superchar	Ad	Manual		6
18.117	27.558	21.419				SC	Superchar	AMS	Automated Manual-	Selectable	(e.g. Au
17.0438	26.023	20.1767				SC	Superchar	Ad	Manual		6
17.6699	25.953	20.6333				SC	Superchar	AMS	Automated Manual-	Selectable	(e.g. Au
16.761	26.9697	20.2022				TC	Turbochar	AMS	Automated Manual-	Selectable	(e.g. Au
16.761	26.9697	20.2022				TC	Turbochar	AMS	Automated Manual-	Selectable	(e.g. Au
15.2801	25.5632	18.6574				TC	Turbochar	Ad	Semi-Automatic		8
22.407	31.1674	25.6515				TC	Turbochar	AMS	Automated Manual-	Selectable	(e.g. Au
22.407	31.1674	25.6515				TC	Turbochar	AMS	Automated Manual-	Selectable	(e.g. Au
17.751	25.2021	20.4751				TC	Turbochar	Ad	Manual		6
11.2476	18.7327	13.7134	G			TC	Turbochar	Ad	Semi-Automatic		6
15.0109	24.4645	18.1706				TC	Turbochar	Ad	Semi-Automatic		8
11.5043	18.877	13.9574	G			TC	Turbochar	SA	Semi-Auto		6
14.0639	23.9773	17.2766	G			TC	Turbochar	Ad	Semi-Automatic		8
11.2476	18.7327	13.7134	G			TC	Turbochar	Ad	Semi-Automatic		6
11.5043	18.877	13.9574	G			TC	Turbochar	SA	Semi-Auto		6
10.5402	17.7129	12.8889	G			TC	Turbochar	Ad	Semi-Automatic		8
8.4232	14.7698	10.4424	G			TC	Turbochar	AMS	Automated Manual-	Selectable	(e.g. Au
10.6055	18.4729	13.1199	G			NA	Naturally AMS		Automated		7
9.7957	16.2453	11.9264	G			NA	Naturally AMS	Ad	Automated Manual-	Selectable	(e.g. Au
13.4655	19.7573	15.718	G			NA	Naturally AMS	Ad	Automated Manual-	Selectable	(e.g. Au

Verify as needed	12.0883	19.9831	14.7021	G	NA	Naturally Aspirated	Manual	6
	13.3954	19.7741	15.6701	G	NA	Naturally Aspirated	Automated Manual- Selectable	(e.g. Au
Verify as needed	11.5388	19.5451	14.1465	G	NA	Naturally Aspirated	Manual	6
	28.6469	38.87	32.4925		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	22.0202	29.5574	24.8746		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	27.8088	40.6616	32.4203		TC	Turbocharged	Manual	6
	20.5408	29.7034	23.8517		TC	Turbocharged	Manual	6
	22.2864	28.5683	24.7338		NA	Naturally Aspirated	Semi-Auto	6
	21.7201	30.6767	25.0054		NA	Naturally Aspirated	Manual	5
	21.1383	28.6751	23.9738		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	27.8088	40.6616	32.4203		TC	Turbocharged	Manual	6
	20.5408	29.7034	23.8517		TC	Turbocharged	Manual	6
	21.2302	26.9749	23.4804		NA	Naturally Aspirated	Semi-Automatic	6
	21.8706	31.0367	25.2227		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	20.8232	31.7255	24.6324		TC	Turbocharged	Manual	6
	17.4935	26.5716	20.6716		NA	Naturally Aspirated	Semi-Automatic	6
	16.9415	25.219	19.8774		NA	Naturally Aspirated	Semi-Automatic	6
	21.7634	30.1121	24.8658		TC	Turbocharged	Automated	6
	29.8946	41.5209	34.2046		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
	23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
	22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
	19.278	26.8882	22.0917		TC	Turbocharged	Manual	6
	24.2237	32.5108	27.3624		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	21.2839	30.8324	24.7304		TC	Turbocharged	Manual	6
	29.8946	41.5209	34.2046		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	23.7854	31.6043	26.7652		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	23.1009	29.1554	25.4822		NA	Naturally Aspirated	Semi-Auto	6
	24.3944	33.6309	27.8344		NA	Naturally Aspirated	Manual	5
	29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
	21.8931	32.6043	25.6912		TC	Turbocharged	Manual	6
	23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
	22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
	41.6792	48.86	44.6309		TC	Turbocharged	Automated	7
	28.8556	39.4682	32.8278		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
	23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
	22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
	30.4633	40.2057	34.1916		TC	Turbocharged	Automated Manual- Selectable	(e.g. Au
	30.8024	42.6219	35.1943		TC	Turbocharged	Manual	6
	22.1078	30.6611	25.2814		NA	Naturally Aspirated	Semi-Automatic	6
	21.8993	32.1378	25.5642		NA	Naturally Aspirated	Manual	5
	19.7174	27.8048	22.6868		NA	Naturally Aspirated	Automated Manual- Selectable	(e.g. Au
	20.6233	26.0617	22.7606		TC	Turbocharged	Semi-Auto	6
	18.1488	26.2617	21.0791		TC	Turbocharged	Manual	6
	20.402	25.8545	22.5412		TC	Turbocharged	Semi-Auto	6
	19.649	28.9961	22.9829		TC	Turbocharged	Semi-Automatic	8
	17.0411	22.7325	19.2048		NA	Naturally Aspirated	Semi-Automatic	8
	19.8843	23.7762	21.4655		SC	Supercharged	Semi-Automatic	8

Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IF	Fuel Usag	Fuel Usag
Automated Manual with paddles)	N	F	2-Wheel DDVWXV02.0U5N			5	DU	Diesel, ultr	
Automated Manual with paddles)	N	F	2-Wheel DDVWXV02.03PA		10		GP	Gasoline (Premium	
N	N	F	2-Wheel DDVWXV02.03PA		10		GP	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
MT with paddles)	N	F	2-Wheel DDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
N	N	A	All Wheel DADXV02.03UB		10		GP	Gasoline (Premium	
MT with paddles)	N	F	2-Wheel DDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel IDADXV02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel DADXV02.03UB		10		GP	Gasoline (Premium	
N	N	A	All Wheel DADXV02.03UB		10		GP	Gasoline (Premium	
MT with paddles)	N	F	2-Wheel DDVWXV02.03UB		10		GP	Gasoline (Premium	
Y	N	A	All Wheel DADXV02.03UB		10		GP	Gasoline (Premium	
Y	N	A	All Wheel DADXJ03.03UF		10		GP	Gasoline (Premium	
Y	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
ounded unadjusted CO2 value, we calculate 323.8. Error in combined unrounded adjusted CO2 value, we calculate 4	N	A	All Wheel DADXV04.03UJ		10		GP	Gasoline (Premium	
ounded unadjusted CO2 value, we calculate 323.8. Error in combined unrounded adjusted CO2 value, we calculate 4	N	A	All Wheel IDADXJ03.0		10		GP	Gasoline (F	
Y	N	A	All Wheel DADXV04.03UJ		10		GP	Gasoline (Premium	
Y	N	A	All Wheel DADXV06.3UA8		10		GP	Gasoline (Premium	
Y	N	A	All Wheel DADXV02.03UB		10		GP	Gasoline (Premium	
Y	N	A	All Wheel IDADXT02.0		10		GP	Gasoline (F	
Y	N	A	All Wheel DADXT02.0HUB		10		GP	Gasoline (Premium	
Y	N	A	All Wheel DADXT03.03UG			5	DU	Diesel, ultra low s	
Y	N	A	All Wheel IDADXT03.0		10		GP	Gasoline (I	
Automated Manual with paddles)	N	A	All Wheel IDADXV04.0		10		GP	Gasoline (F	
Automated Manual with paddles)	N	A	All Wheel DADXV04.23UL		10		GP	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel DADXJ03.03UF		10		GP	Gasoline (Premium	
N	N	A	All Wheel DADXJ03.03UF		10		GP	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel DADXJ03.03UF		10		GP	Gasoline (Premium	
N	N	A	All Wheel DADXJ03.03UF		10		GP	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel DADXJ03.03UF		10		GP	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel DADXV04.03UJ		10		GP	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel DADXV04.03UJ		10		GP	Gasoline (Premium	
Y	N	A	All Wheel DADXV04.03UJ		10		GP	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel DADXV02.03UA		10		GP	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel DADXV02.03UA		10		GP	Gasoline (Premium	
N	N	A	All Wheel DADXV02.53UK		10		GP	Gasoline (Premium	
Y	N	A	All Wheel DBEXV06.0501		85	333	GP	Gasoline (Premium	
Y	N	A	All Wheel DADXV04.03UJ		10		GP	Gasoline (Premium	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (F	
Y	N	A	All Wheel DADXV04.03UJ		10		GP	Gasoline (Premium	
Y	N	A	All Wheel DBEXV06.0501		85	333	GP	Gasoline (Premium	
Y	N	A	All Wheel IDBEXV06.0		85	333	GP	Gasoline (I	
Y	N	R	2-Wheel DBEXV06.84LA		10		GP	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel DBGTV08.0V16		10		GPR	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel IDNLXV06.0		10		GPR	Gasoline (I	
Automated Manual with paddles)	N	A	All Wheel DADXV06.5L83		10		GPR	Gasoline (Premium	
Automated Manual with paddles)	N	A	All Wheel DADXV05.2LR8		10		GP	Gasoline (Premium	

N	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (I
Y	omated Manual with paddles)		All Wheel DAD XV05.2LR8	10		GP	Gasoline (Premium
N	N	A	All Wheel IDAD XV05.	10		GP	Gasoline (I
Y	omated Manual with paddles)		2-Wheel Drive FV02.0U5N		5	DU	Diesel, ultra low s
Y	omated Manual with paddles)		2-Wheel Drive FV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive FV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive FV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive VV02	10		G	Gasoline (I
N	N	F	2-Wheel Drive FV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with paddles)		2-Wheel Drive FV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive FV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive FV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive FV02.5U3A	10		G	Gasoline (Regular
Y	omated Manual with paddles)		2-Wheel Drive FV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive FV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive FV03.6U46	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive XV03.6U46	10		GP	Gasoline (Premium
Y	omated Manual with paddles)		2-Wheel Drive VV02.	10		GP	Gasoline (F
Y	omated Manual with paddles)		2-Wheel Drive FV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive FV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive FV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive FV02.5U3M	10		G	Gasoline (Regular
N	N	A	All Wheel DAD XV02.03UA	10		GP	Gasoline (Premium
Y	omated Manual with paddles)		2-Wheel Drive XV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive XV02.03UA	10		GP	Gasoline (Premium
Y	omated Manual with paddles)		2-Wheel Drive FV02.0U5N		5	DU	Diesel, ultra low s
Y	omated Manual with paddles)		2-Wheel Drive FV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive VV02.	10		G	Gasoline (F
N	N	F	2-Wheel Drive FV02.0U36	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive VV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel Drive FV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive FV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive FV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with paddles)		2-Wheel Drive FV02.0U4S		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive FV02.0U4S		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive FV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive FV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with paddles)		2-Wheel Drive FV03.6U41	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive VV02.	10		GP	Gasoline (I
N	N	F	2-Wheel Drive FV02.03UA	10		GP	Gasoline (Premium
Y	N	A	All Wheel IDVWXJ02.	10		GP	Gasoline (I
Y	N	A	All Wheel DAD XT03.02UG		5	DU	Diesel, ultra low s
Y	N	A	All Wheel Drive XT03.6U76	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive XT03.0HEV	10		GP	Gasoline (Premium



Product Name	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MPG (15 miles per gallon)	Not exempt		89	20				
MPG (15 miles per gallon)	Not exempt		89	20				
MPG (15 miles per gallon)	Not exempt		89	20				
MPG (15 miles per gallon)	Not exempt				89	20		
MPG (15 miles per gallon)	Not exempt				91	12		
MPG (15 miles per gallon)	Not exempt				91	12		
MPG (15 miles per gallon)	Not exempt				91	12		
MPG (15 miles per gallon)	Not exempt		81	10				
MPG (15 miles per gallon)	Not exempt		81	10				
MPG (15 miles per gallon)	Not exempt		84	12				
MPG (15 miles per gallon)	Not exempt		84	12				
MPG (15 miles per gallon)	Not exempt				98	16		
MPG (15 miles per gallon)	Not exempt				98	16		
MPG (15 miles per gallon)	Not exempt				98	16		
MPG (15 miles per gallon)	Not exempt						94	25
MPG (15 miles per gallon)	Not exempt				100	15		
MPG (15 miles per gallon)	Not exempt				100	15		
MPG (15 miles per gallon)	Not exempt				107	15		
MPG (15 miles per gallon)	Not exempt				107	15		
MPG (15 miles per gallon)	Not exempt				107	15		
MPG (15 miles per gallon)	Not exempt				90	28		
MPG (15 miles per gallon)	Truck							
MPG (15 miles per gallon)	Truck							
MPG (15 miles per gallon)	Truck							
MPG (15 miles per gallon)	Truck							
MPG (15 miles per gallon)	Not exempt		84	13				
MPG (15 miles per gallon)	Not exempt		81	10				
MPG (15 miles per gallon)	Not exempt				90	13		
MPG (15 miles per gallon)	Not exempt				90	13		
MPG (15 miles per gallon)	Not exempt		84	13				
MPG (15 miles per gallon)	Not exempt		84	13				
MPG (15 miles per gallon)	Not exempt		81	10				
MPG (15 miles per gallon)	Not exempt				98	16		
MPG (15 miles per gallon)	Not exempt						94	25
MPG (15 miles per gallon)	Not exempt				100	15		
MPG (15 miles per gallon)	Not exempt		74	13				
MPG (15 miles per gallon)	Not exempt						74	13
MPG (15 miles per gallon)	Not exempt		102	13				
MPG (15 miles per gallon)	Not exempt		89	11				
MPG (15 miles per gallon)	Not exempt		89	11				
MPG (15 miles per gallon)	Not exempt		86	7				
MPG (15 miles per gallon)	Not exempt		86	7				
MPG (15 miles per gallon)	Not exempt		86	7				
MPG (15 miles per gallon)	Not exempt				100	11		
MPG (15 miles per gallon)	Not exempt							
MPG (15 miles per gallon)	Not exempt							
MPG (15 miles per gallon)	Not exempt							
MPG (15 miles per gallon)	Not exempt							

MPG (Unleaded, Recommended)	Not exempt			
MPG (Leaded, Recommended)	Not exempt			
MPG (Unleaded, Recommended)	Not exempt			
MPG (15 ppm, maxing 0.10)	Not exempt		85	15
MPG (Leaded, Recommended)	Not exempt		85	15
MPG (15 ppm, maxing 0.10)	Not exempt		85	15
MPG (Leaded, Recommended)	Not exempt		85	15
MPG (Unleaded, Recommended)	Not exempt		85	15
MPG (Leaded, Recommended)	Not exempt		85	15
MPG (Leaded, Recommended)	Not exempt	81	7	
MPG (15 ppm, maxing 0.10)	Not exempt	81	7	
MPG (Leaded, Recommended)	Not exempt	81	7	
MPG (Leaded, Recommended)	Not exempt	81	7	
MPG (Leaded, Recommended)	Not exempt	94	13	
MPG (Leaded, Recommended)	Not exempt	94	13	
MPG (Leaded, Recommended)	Not exempt	94	13	
MPG (Leaded, Recommended)	Not exempt	94	13	
MPG (Leaded, Recommended)	Not exempt	77	11	
MPG (15 ppm, maxing 0.10)	Not exempt		94	15
MPG (15 ppm, maxing 0.10)	Not exempt		94	15
MPG (Leaded, Recommended)	Not exempt		94	15
MPG (Leaded, Recommended)	Not exempt		94	15
MPG (Leaded, Recommended)	Not exempt		94	15
MPG (Leaded, Recommended)	Not exempt		94	15
MPG (Leaded, Recommended)	Not exempt		94	15
MPG (15 ppm, maxing 0.10)	Not exempt	94	16	
MPG (Leaded, Recommended)	Not exempt	94	16	
MPG (Leaded, Recommended)	Not exempt	94	16	
MPG (15 ppm, maxing 0.10)	Not exempt	94	16	
MPG (Leaded, Recommended)	Not exempt	94	16	
MPG (Leaded, Recommended)	Not exempt	94	16	
MPG (15 ppm, maxing 0.10)	Not exempt	94	16	
MPG (15 ppm, maxing 0.10)	Not exempt	94	16	
MPG (Leaded, Recommended)	Not exempt	94	16	
MPG (Leaded, Recommended)	Not exempt	94	16	
MPG (15 ppm, maxing 0.10)	Not exempt	102	16	
MPG (15 ppm, maxing 0.10)	Not exempt	102	16	
MPG (Leaded, Recommended)	Not exempt	102	16	
MPG (Leaded, Recommended)	Not exempt	102	16	
MPG (Leaded, Recommended)	Not exempt	102	16	
MPG (Unleaded, Recommended)	Truck			
MPG (Leaded, Recommended)	Truck			
MPG (Unleaded, Recommended)	Truck			
MPG (15 ppm, maxing 0.10)	Truck			
MPG (Leaded, Recommended)	Truck			
MPG (Leaded, Recommended)	Truck			

Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadj
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corrected	
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C	
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values	
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v	
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unrnd	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and	
2200	2200		
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched	
2600	2600		
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes	
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to	
2700	2700	S/S set to yes	
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrnd city CO2 value corrected, S	
3000	3000	S/S set to yes	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c	
2500	2500	corrected unadj unrounded highway and combined values	
2200	2200		
2600	2600	CO2 corrections, additional fuel costs in saving field, corrected Aug 14th	
3150	3150	CO2 corrections, again Aug 14th	
3150	3150	CO2 corrections	
3150	3150	corrected city CO2 value, typo	
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected city unadj unrounded CO2, Aug 14th	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected unadj and adj CO2 values, Aug 14th	
2850	2850	CO2 corrections	
2850	2850	CO2 corrections	
3000	3000		
2200	2200	CO2 corrections, Aug 14th correction	
2200	2200	CO2 corrections, Aug 14th	
2850	2850		
4050	4050	corrected unadj unrnd combined CO2 value Aug 14th	9.5
3150	3150		
4050	4050	correct adj8 14 10	10.3
3350	3350		
4050	4050	corrected Comb adj unrnd CO2 10	9.5
4050	4050	8 14 10	10.3
4400	4400		
5700	5700	corrected lock out to "yes" and AMS.	
4400	4400	lock up to YES., CO2 corrections Aug 14, S/S set to yes	
4750	4750	adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes	
3550	3550	corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th	

3800	3800
3550	3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure
4050	4050
1800	1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value
2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED
1800	1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c
2400	2400 corrected CO2 values, corrected fuel cost over 5 years
2150	2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g
2150	2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u
2400	2400 annual fuel cost corrected, post release 10 amd AMS used, corrected highway value from 28 t
1800	1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c
2400	2400 CO2 corrections, fuel spending corrected to \$400
2300	2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a
2300	2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre
2700	2700 update after Verify release 10
2850	2850 UPDATE after Verify release 10
2300	2300 CO2 corrections
1700	1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre
1700	1700 corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th, CO2 rounding co
2050	2050 early label, update after Verify release 10, CO2 corrections
2050	2050 update after Verify release 10 issued, CO2 comb correction
2600	2600 CO2 corrections, CO2 rounding corrections Aug 20th
2100	2100 CO2 corrections
2300	2300 early label, upate after Verify release 10
1700	1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre
2100	2100 corrected unadjusted unrounded CO2 highway and conbined values and combined adjusted w
2150	2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6
1900	1900 FE and GHG ratings corrected to 7
1700	1700 corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th, CO2 rounding co
2200	2200 CO2 corrections
2050	2050 early label, update after Verify release 10, CO2 corrections
2050	2050 update after Verify release 10 issued, CO2 corrections
1250	1250
1750	1750 CO2 corrections; inhouse dervied 5-cycle formula corrected Aug 15th
1700	1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th, CO2 rounding corrections A
2050	2050 early label, update after Verify release 10, CO2 corrections
2050	2050 update after Verify release 10 issued, CO2 corrections
1700	1700
1650	1650
2150	2150 CO2 corrections
2050	2050 CORRCTED 5 YEAR FUEL SAVINGS, CO2 corrections
2500	2500 CO2 correction
2500	2500 corrected CO2 values, CO2 rounding corrections Aug 20th
2700	2700 CO2 corrections, CO2 rounding corrections Aug 20th
2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections, CO2 roundi
2500	2500 CO2 corrections
3000	3000 CO2 correction Aug 15th, CO2 rounding corrections Aug 20th
2700	2700 CO2 corrections



, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

roup

nrounded highway and combined CO2 values

o 29 MPG

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

ed MPG value

nd corresponding 5-cycle values

cted calculated values

ction Aug 20th

rrections Aug 20th

ction Aug 20th

hole CO2 value

rrections Aug 20th

ug 20th

ng corrections Aug 20th

Relative Fuel	City CO2	Hwy CO2	Comb CO2	Fuel2 EPA	Description	Intake Val	Exhaust V	Carline CI	Carline CI
						2	27	Small Stati	
					SIDI;	2	27	Small Station Wag	
					SIDI;	2	27	Small Station Wag	
					SIDI;	2	27	Small Stati	
					SIDI;	2	24	Compact C	
					SIDI;	2	24	Compact C	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Ca	
					SIDI; Unde	2	25	Midsize Ca	
					SIDI;	2	25	Midsize Cars	
					SIDI; Unde	2	26	Large Cars	
					SIDI;	2	26	Large Cars	
					SIDI;	2	26	Large Cars	
					SIDI;	2	27	Small Station Wag	
					SIDI;	2	231	Small SUV 4WD	
					SIDI;	2	231	Small SUV 4WD	
						2	233	Standard SUV 4W	
					SIDI;	2	233	Standard SUV 4W	
					SIDI;	2	23	Subcompa	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	21	Two Seaters	
4650	794	469	648	4650	FFV;	2	25	Midsize Cars	
					SIDI;	2	24	Compact Cars	
4650	794	469	648	4650	FFV;	2	24	Compact C	
					SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	23	Subcompa	
						1	15	Midsize Cars	
						2	21	Two Seaters	
						2	21	Two Seate	
						2	21	Two Seaters	
					SIDI;	2	21	Two Seaters	

SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact C
	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	23	Subcompa
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	1	14	Compact C
	1	14	Compact Cars
	2	24	Compact C
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact C
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
SIDI;	2	25	Midsize Cars
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W



Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique LaLabel Rec	Relabel	Relabel D
cars	Derived 5-cycle label 6/22/2012	12265	N	N	
cars	Vehicle Specific 5-cycle 6/11/2012	11328	N	N	
cars	Vehicle Specific 5-cycle 6/11/2012	11302	N	N	
cars	Vehicle Specific 5-cycle 6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12092	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10360	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12093	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10362	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10363	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle 6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10364	N	N	
car	Derived 5-cycle label 6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle 6/22/2012	12228	N	N	
car	Vehicle Specific 5-cycle 6/22/2012	12229	N	N	
car	Vehicle Specific 5-cycle 6/15/2012	12227	N	N	
car	Vehicle Specific 5-cycle 6/22/2012	12230	N	N	
car	Vehicle Specific 5-cycle 6/15/2012	12226	N	N	
car	Vehicle Specific 5-cycle 8/16/2012	10646	N	N	
cars	Derived 5-cycle label 4/26/2012	11490	N	N	
	Vehicle Specific 5-cycle 7/13/2012	11319	N	N	
	Vehicle Specific 5-cycle 9/28/2012	12158	N	N	
D	Vehicle Specific 5-cycle 7/16/2012	12105	N	N	
D	Derived 5-cycle label 6/11/2012	12103	N	N	
car	Vehicle Specific 5-cycle 6/18/2012	11510	N	N	
car	Vehicle Specific 5-cycle 7/13/2012	10452	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12106	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12108	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12111	N	N	
car	Vehicle Specific 5-cycle 7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle 7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle 8/27/2012	12122	N	N	
car	Vehicle Specific 5-cycle 6/18/2012	12115	N	N	
car	Vehicle Specific 5-cycle 6/18/2012	12113	N	N	
car	Vehicle Specific 5-cycle 6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle 3/30/2012	12116	N	N	
car	Vehicle Specific 5-cycle 4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle 3/30/2012	12119	N	N	
car	Vehicle Specific 5-cycle 4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle 3/30/2012	12117	N	N	
car	Vehicle Specific 5-cycle 3/30/2012	10184	N	N	
car	Vehicle Specific 5-cycle 3/30/2012	12211	N	N	
car	Vehicle Specific 5-cycle 7/12/2012	11087	N	N	
car	Vehicle Specific 5-cycle 3/30/2012	12233	N	N	
car	Vehicle Specific 5-cycle 1/14/2013	12234	N	N	
car	Vehicle Specific 5-cycle 6/11/2012	12128	N	N	

car	Vehicle Specific 5-cycle 6/20/2012	10237		N	N
car	Vehicle Specific 5-cycle 6/22/2012	12130		N	N
car	Vehicle Specific 5-cycle 6/20/2012	10238		N	N
car	Derived 5-cycle label 7/19/2012	12135		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10187		N	N
car	Derived 5-cycle label 6/25/2012	12272		N	N
car	Vehicle Specific 5-cycle 7/12/2012	12271		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10751		N	N
car	Vehicle Specific 5-cycle 7/30/2012	11373		N	N
car	Derived 5-cycle label 7/30/2012	10277		N	N
car	Derived 5-cycle label 6/25/2012	12273		N	N
car	Vehicle Specific 5-cycle 7/12/2012	11526		N	N
car	Vehicle Specific 5-cycle 7/30/2012	11287		N	N
car	Vehicle Specific 5-cycle 7/16/2012	10186		N	N
car	Vehicle Specific 5-cycle 7/25/2012	11044		N	N
car	Vehicle Specific 5-cycle 7/16/2012	10532		N	N
car	Vehicle Specific 5-cycle 7/16/2012	10534		N	N
car	Vehicle Specific 5-cycle 6/11/2012	11527		N	N
car	Derived 5-cycle label 6/22/2012	12264		N	N
car	Derived 5-cycle label 6/25/2012	12268		N	N
car	Vehicle Specific 5-cycle 7/30/2012	11528		N	N
car	Vehicle Specific 5-cycle 7/30/2012	11529		N	N
car	Vehicle Specific 5-cycle 6/11/2012	12277		N	N
car	Vehicle Specific 5-cycle 6/16/2012	11531		N	N
car	Vehicle Specific 5-cycle 7/30/2012	10531		N	N
car	Derived 5-cycle label 6/22/2012	12263		N	N
car	Vehicle Specific 5-cycle 6/18/2012	11372		N	N
car	Vehicle Specific 5-cycle 6/20/2012	11219		N	N
car	Vehicle Specific 5-cycle 6/20/2012	11300		N	N
car	Derived 5-cycle label 6/25/2012	12267		N	N
car	Vehicle Specific 5-cycle 6/16/2012	11532		N	N
car	Vehicle Specific 5-cycle 7/30/2012	11533		N	N
car	Vehicle Specific 5-cycle 7/30/2012	11535		N	N
car	Vehicle Specific 5-cycle 6/18/2012	12261		N	N
cars	Derived 5-cycle label 6/25/2012	12151		N	N
cars	Derived 5-cycle label 6/25/2012	12266		N	N
cars	Vehicle Specific 5-cycle 7/30/2012	11534		N	N
cars	Vehicle Specific 5-cycle 7/30/2012	11536		N	N
car	Vehicle Specific 5-cycle 6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle 6/18/2012	10163		N	N
car	Vehicle Specific 5-cycle 6/23/2012	11539		N	N
car	Vehicle Specific 5-cycle 6/23/2012	11547		N	N
car	Vehicle Specific 5-cycle 6/11/2012	11554		N	N
	Derived 5-cycle label 6/18/2012	12275		N	N
	Vehicle Specific 5-cycle 6/11/2012	12276		N	N
	Derived 5-cycle label 6/11/2012	12274		N	N
D	Vehicle Specific 5-cycle 6/18/2012	11563		N	N
D	Derived 5-cycle label 6/25/2012	12278		N	N
D	Derived 5-cycle label 6/25/2012	11559		N	N

Suppress	Police/Em	Comment	Cyl Deact	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Energy St
N	N		N		N		N		
N	N	Test Group	Qualifies as PZEV.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N	Test Group	Qualifies as PZEV.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N	ENGINE CCN		Y	CONTINUOUS				
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS		AUDI VALV		
N	N	Engine Code CEUA. St	Det Stop Equipped	Y	CONTINUOUS		AUDI VALV		
N	N	Engine Code CEUA. St	Det Stop Equipped	Y	CONTINUOUS		AUDI VALV		
N	N	Engine Code CEUA. St	Det Stop Equipped	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	Intake and Exhaust	cam timing is electronically con			
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N	Engine cod	N	Y	CONTINUOUS		AUDI VALV		
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	N					
N	N		N	Y	CONTINUOUS				
N	N		N	Y	Continuously				
N	N		N	Y	Continuously	intake and exhaust cam adjustment			
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING SYSTEM	
N	N	Engine Code CEUA. St	Det Stop Equipped	Y	CONTINUOUS		AUDI VALV		
N	N	Engine Code CEUA. St	Det Stop Equipped	Y	CONTINUOUS		AUDI VALV		
N	N	Engine Code CEUA. St	Det Stop Equipped	Y	CONTINUOUS		AUDI VALV		
N	N	ENGINE CODE CDMA ONLY.		Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N	ENGINE CODE CDMA ONLY.		Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N		N	Y	CONTINUOUS	LY	INTAKE AND EXHAUST CAM ADJU		
N	N	Continental	Flying Spur	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M	
N	N	Engine Code CEUA. St	Det Stop Equipped	Y	CONTINUOUS		AUDI VALV		
N	N	Continental	N	Y	INLET AND	N			
N	N	Engine Code CEUA. St	Det Stop Equipped	Y	CONTINUOUS		AUDI VALV		
N	N	Continental	Flying Spur	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M	
N	N	Continental	N	Y	INLET AND	N			
N	N		Y	Cylinder deactivation	Variable	intake and exhaust			
N	N	CHARGE AIR COOLER (AIR / LIQUID) - - SFI/AN	INLET AND OUTLET CONTINUOUSLY VARIABLE / M						
N	N		Y	ELECTRO	HYDRAULN				
N	N		Y	ELECTRONICALLY CONTROLLED	INLET AND OUTLET	CONTINUOUSLY	VARIABLE / M		
N	N	ENGINE CODE CEH (GALLARDO COUPE AND	INLET AND						

N	N	ENGINE CODE	Y	INLET AN IN
N	N	ENGINE CODE CEH (GALLARDO COUPE AND INDY)	N	OUTLET CONTINUOUSLY VARIABLE / M
N	N	ENGINE CODE	Y	INLET AN IN
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CO IN
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	CONTINUOUS
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	MECHANICAL, Battery(s)
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	SCR Equipped	N	N
N	N	SCR Equipped	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	Electronic control / Hydraulic adjustment
N	N	N	Y	position of N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of N
N	N	N	N	N
N	N	N	Y	INTAKE / EXHAUST CAM TIMING ADJUSTED HYDRAU
N	N	V6 CYLINDER 2 BANK SYSTEM	Y	MECHANICAL HYDRAULIC VVT SYSTEM (s) INTAKE C

Device Descri	Battery	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit
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These observations are for the purpose of the design and are not intended to be used for the design of the engine. The engine is designed to be used for the purpose of the design and is not intended to be used for the purpose of the design.

1 Lithium Ion	266	5	37 On-Board
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STMENT

ECHANICAL-HYDRAULIC

These observations are for the purpose of the design and are not intended to be used for the design of the engine. The engine is designed to be used for the purpose of the design and is not intended to be used for the purpose of the design.

ECHANICAL-HYDRAULIC

These observations are for the purpose of the design and are not intended to be used for the design of the engine. The engine is designed to be used for the purpose of the design and is not intended to be used for the purpose of the design.

ECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

adjust valves on a single camshaft. No change in valve overlaps.

MECHANICAL-HYDRAULIC

CONTROLLED CONTINUOUSLY VVT

CONTROLLED CONTINUOUSLY VVT

ECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC  
ECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
AL HYDRAULIC

YDRAULIC  
controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
y controlled and hydraulically adjusted  
y controlled and hydraulically adjusted

YDRAULIC  
YDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC

YDRAULIC  
AKE AND OUTLET CAMS  
Lithium Ion 220 5 27 On-Board

YDRAULIC  
YDRAULIC

YDRAULIC  
YDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

LICALLY AND CONTROLLED ELECTRONICALLY  
AMS 1 NiMH 288 6 21.5 On-Board

es(2)ine3 od gear at this loer, f GT grea tter by lin 4C, h ag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GT grea tter by lin 4C, h ag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical Regen BrakeBoth Y 1AC Induction

es(2)ine3 od gear at this loer, f GT grea tter by lin 4C, h ag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GT grea tter by lin 4C, h ag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GT grea tter by lin 4C, h ag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GT grea tter by lin 4C, h ag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GT grea tter by lin 4C, h ag ls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical FBRAKE PEFront WheY

1Other

Other BRAKE PEDAL TRIGGERED REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM 1Other



Motor	Ger	Rated Mot	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell	V Off Board	Camless V	Oil Viscosi
			CRDI	Common FN			N			5W40
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark IgnitN			N			5W40
			GDI	Spark Ignit			N			5W40 VW
			GDI	Spark Ignit			N			5W40 VW
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignit			N			5W40 VW
			GDI	Spark Ignit			N			5W40 VW
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignit			N			5W40 VW
			GDI	Spark Ignit			N			5W40 VW
h			GDI	Spark Ignition Direct Injection			N			5W30 VW 50400 /
			GDI	Spark Ignit			N			5W40 VW
h			GDI	Spark Ignition Direct Injection			N			5W30 VW 50400 /
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignit			N			5W40 VW
		40	GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			CRDI	Common Rail Direct Diesel Injection			N			5W30 VW 50700
			GDI	Spark Ignit			N			5W40 VW
			GDI	Spark Ignit			N			5W30 VW
			GDI	Spark Ignition Direct Injection			N			5W30 VW 50400 /
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
h			GDI	Spark Ignition Direct Injection			N			5W30 VW 50400 /
h			GDI	Spark Ignition Direct Injection			N			5W30 VW 50400 /
h			GDI	Spark Ignition Direct Injection			N			5W30 VW 50400 /
			GDI	Spark Ignition Direct Injection			N			5W40
			GDI	Spark Ignition Direct Injection			N			5W40
			GDI	Spark Ignition Direct Injection			N			5W40 VW 50200
			MFI	Multipoint/Sequential fuel injection			N			5W30 VW 504 00
h			GDI	Spark Ignition Direct Injection			N			5W30 VW 50400 /
			MFI	MultipointN			N			5W30 VW
h			GDI	Spark Ignition Direct Injection			N			5W30 VW 50400 /
			MFI	Multipoint/Sequential fuel injection			N			5W30 VW 504 00
			MFI	Multipoint/N			N			5W30 VW
			MFI	Multipoint/sequential fuel injection			N			0W40 / VW50200
			MFI	Multipoint/sequential fuel injection			N			10W60 VW 50101
			MFI	Multipoint/N			N			5W30 VW
			MFI	Multipoint/sequential fuel injection			N			5W30 VW 50400 /
			GDI	Spark Ignition Direct Injection			N			10W60 VW 50101

3 PHASE F

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3 PHASE CURRENT TERM. MAGNET

GDI	Spark Ignit	N	10W60 VW
GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
GDI	Spark Ignit	N	10W60 VW
CRDI	Common Rail Direct Diesel Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/	N	10W40 / V'
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignit	N	5W40 / VW
CRDI	Common Rail Direct Diesel Injection	N	5W40
CRDI	Common Rail Direct Diesel Injection	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignit	N	5W40
GDI	Spark Ignit	N	5W40
GDI	Spark Ignit	N	5W40
CRDI	Common Rail Direct Diesel Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint	N	5W40 VW
MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
CRDI	Common FN	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignit	N	5W40 VW
CRDI	Common Rail Direct Diesel Injection	N	5W40
CRDI	Common Rail Direct Diesel Injection	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
CRDI	Common Rail Direct Diesel Injection	N	5W40 VW 50501
CRDI	Common Rail Direct Diesel Injection	N	5W40 VW 50501
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignit	N	5W40 VW
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignit	N	5W40 VW
CRDI	Common Rail Direct Diesel Injection	N	5W30 VW 50700
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignit	N	5W40 VW 50200

Stop/StartStop/StartTrans in FETrans as IModel TypCharge De Charge De Charge SuCharge SuEPA Calcul

N	No	Auto(AM-S	Auto(AM-S
N	No	Auto(AM-S	Auto(AM-S6)
N	No	Manual(M	Manual(M6)3 frt manual
N	No	Auto(AM-S	Auto(AM-SA3 quattro
N	No	Auto(AV-S	Auto(AV-S
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M	Manual(M6)
N	No	Auto(AV-S	Auto(AV-S
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M	Manual(M6)
N	No	Auto(AV-S	Auto(AV-S)udi A6 CVT
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi A6 quattro
Y	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi Q7
Y0700	No	Auto(AM-S	Auto(AM-S
Y0700	No	Auto(AM-S	Auto(AM-S7)
N	No	Auto(AM-S	Auto(AM-S7)
N	No	Manual(M	Manual(M6)
N	No	Auto(AM-S	Auto(AM-S7)
N	No	Manual(M	Manual(M6)
N	No	Auto(AM-S	Auto(AM-S7)
Y0700	No	Auto(AM-S	Auto(AM-S7)
Y0700	No	Auto(AM-S	Auto(AM-S7)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(AM-S	Auto(AM-S6) Coupe quattro
N	No	Auto(AM-S	Auto(AM-S6) Coupe quattro
N	No	Manual(M	Manual(M6)TRS
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S6)	Auto(S6)
VW50500	No	Auto(S8)	Auto(S8)
Y 50500	No	Auto(AM-S	Auto(AM-S7)
Y0700	Yes	Auto(AM-S	Auto(AM-S
Y0700	Yes	Auto(AM-S	Auto(AM-S7)
Y 50500	No	Auto(AM-S	Auto(AM-S6)

N	50500	No	Manual(M6)Manual(M6)Gallardo C
N	50500	No	Auto(AM-S6)Auto(AM-S6)
N	50500	No	Manual(M6)Manual(M6)Gallardo S
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Manual(M6)Manual(M6)
N		No	Manual(M6)Manual(M6)
N		No	Auto(S6) Auto(S6)
N		No	Manual(M5)Manual(M5)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Manual(M6)Manual(M6)
N		No	Manual(M6)Manual(M6)
N		No	Auto(S6) Auto(S6)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Manual(M6)Manual(M6)C M6
N		No	Auto(S6) Auto(S6)
N		No	Auto(S6) Auto(S6)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Manual(M6)Manual(M6)etta SportWagen M6
N		No	Auto(S6) Auto(S6)
N		No	Manual(M5)Manual(M5)
N		No	Manual(M6)Manual(M6)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Manual(M6)Manual(M6)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Auto(S6) Auto(S6) Jetta Base
N		No	Manual(M5)Manual(M5)
N		No	Manual(M6)Manual(M6)Jetta Sport
N		No	Manual(M6)Manual(M6)
N		No	Auto(S6) Auto(S6)
N		No	Manual(M5)Manual(M5)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Manual(M6)Manual(M6)etta SportWagen M6
N		No	Auto(S6) Auto(S6)
N		No	Manual(M5)Manual(M5)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Manual(M6)Manual(M6)
N		No	Auto(S6) Auto(S6)
N		No	Manual(M5)Manual(M5)
N		No	Auto(AM-S6)Auto(AM-S6)
N		No	Auto(S6) Auto(S6) Tiguan for
N		No	Manual(M6)Manual(M6)
N		No	Auto(S6) Auto(S6)
N		No	Auto(S8) Auto(S8)
N		No	Auto(S8) Auto(S8)
N		No	Auto(S8) Auto(S8) Touareg Hybrid

Model Year	Model	EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
46.2		9	8 DVWXV02.	5			
30.8		6	6 DAD XV02.03PA	7			
30.4		6	6 DAD XV02.03PA	7			
30.9		6	6 DAD XV02.0	5			
35.2		7	7 DAD XV02.0	5			
30.8		6	6 DAD XV02.0	5			
33.2		7	7 DAD XV02.03UB	5			
35.2		7	7 DAD XV02.0	5			
30.8		6	6 DAD XV02.0	5			
30.8		6	6 DAD XV02.03UB	5			
33.2		7	7 DAD XV02.03UB	5			
36.9		7	7 DAD XV02.03UB	5			
30.8		6	6 DAD XV02.03UB	5			
28.1		5	5 DAD XJ03.03UF	5			
27.5		5	5 DAD XJ03.0	5			
27.5		5	5 DAD XJ03.0	5			
27.1		5	5 DAD XV04.03UJ	5			
27.5		5	5 DAD XJ03.0	5			
24.4		4	4 DAD XV04.03UJ	5			
19.3		3	3 DVWXV06.3UA8	5			
29.5		6	6 DAD XV02.03UB	5			
28.8		6	6 DAD XT02.0	5			
34		7	7 DAD XT02.0HUB	5			
28.1		5	4 DAD XT03.03UG	5			
22.9		4	4 DAD XT03.	5			
23		4	4 DAD XV04.0	5			
22.6		4	4 DAD XV04.23UL	5			
26.9		5	5 DAD XJ03.03UF	5			
23.5		5	5 DAD XJ03.03UF	5			
26.9		5	5 DAD XJ03.03UF	5			
23.5		5	5 DAD XJ03.03UF	5			
26.4		5	5 DAD XJ03.03UF	5			
25.5		5	5 DAD XV04.03UJ	5			
25.5		5	5 DAD XV04.03UJ	5			
23.6		4	4 DAD XV04.03UJ	5			
33.3		7	7 DAD XV02.03UA	5			
33.3		7	7 DAD XV02.03UA	5			
25.6		5	5 DAD XV02.53UK	5			
17.2		2	2 DBEXV06.0501	5			
23.6		4	4 DAD XV04.03UJ	5			
17.4		2	2 DBEXV06.0	5			
21.8		4	4 DAD XV04.03UJ	5			
17.2		2	2 DBEXV06.0501	5			
17.4		2	2 DBEXV06.	5			
15.9		2	2 DBEXV06.84LA	5			
12.6		1	1 DBGTV08.0V16	5			
16.4		2	2 DNLXV06.	5			
14.5		1	1 DNLXV06.5L83	5			
19.4		3	3 DAD XV05.2LR8	5			

17.4		3	3DAD XV05.	5
19.3		3	3DAD XV05.2LR8	5
16.1		2	2DAD XV05.	5
43.7		8	7DVW XV02.0U5N	5
31.8		6	6DVW XV02.03PA	7
43.4		8	7DVW XV02.0U5N	5
30.7		6	6DVW XV02.03PA	7
31.6		6	6DVW XV02	7
31.9		6	6DVW XV02.5M59	7
31.5		6	6DVW XV02.03PA	7
43.4		8	7DVW XV02.0U5N	5
30.7		6	6DVW XV02.03PA	7
30.3		6	6DVW XV02.5A59	7
32.3		6	6DVW XV02.03PA	7
31.8		6	6DVW XV02.03PA	7
25.8		5	5DVW XV03.6U46	5
24.8		5	5DVW XV03.6U46	5
32.4		6	6DVW XV02.	5
46.2		9	8DVW XV02.0U5N	5
46		9	8DVW XV02.0U5N	5
33.1		7	7DVW XV02.5A59	7
32.2		7	7DVW XV02.5M59	7
28.5		5	5DAD XV02.03UA	5
34.8		7	7DAD XV02.03PA	7
31.2		6	6DAD XV02.03PA	7
46.2		9	8DVW XV02.0U5N	5
35		7	7DVW XV02.03PA	7
32.9		6	6DVW XV02.	5
34.7		7	7DVW XV02.0U36	5
46		9	8DVW XV02.	5
32.6		7	7DVW XV02.03PA	7
33.1		7	7DVW XV02.5A59	7
32.2		7	7DVW XV02.5M59	7
60.9		10	7DVW XV01	7
44.2		8	7DVW XV02.0U5N	5
46		9	8DVW XV02.0U5N	5
33.1		7	7DVW XV02.5A59	7
32.2		7	7DVW XV02.5M59	7
44.6		9	8DVW XV02.0U4S	5
46.4		9	8DVW XV02.0U4S	5
31.9		6	6DVW XV02.5A59	7
31.7		7	7DVW XV02.5M59	7
28.5		6	6DVW XV03.6U41	5
29.9		6	6DVW XJ02.	5
26.4		5	5DVW XJ02.03UA	5
29.6		6	6DVW XJ02.	5
23.3		6	5DAD XT03.02UG	5
25		4	4DVW XT03.6U76	5
28.2		5	5DVW XT03.0HEV	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02 5

DVWXV02.5U3M 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DAD XV02.03UA 5

DAD XV02.03UA 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5



Highway 5-6-1-10(B) City CO2 RHwy CO2 FComb CO2CO2- VoluCO2- VoluCO2-Vol In

3100		340	245	297
	400	432	319	381
	400	442	296	376
	400	442	316	385
600		373	304	342
	400	437	297	374
600		397	276	343
600		373	304	342
	400	437	297	374
	400	437	297	374
600		397	276	343
1350		360	272	320
	400	437	297	374
	1400	482	326	412
	1900	498	321	418
	1900	498	321	418
	1900	515	313	424
	1900	498	321	418
	3400	554	345	460
	6150	675	430	565
	900	444	333	394
	900	450	314	389
600		369	298	337
	1400	541	369	464
	4150	573	412	500
	4150	562	379	480
	4150	558	398	486
	1900	488	321	413
	2650	441	355	402
	1900	488	321	413
	2650	441	355	402
	1900	500	341	429
	2650	530	330	440
	2650	530	330	440
	3400	580	347	475
600		394	284	345
600		394	284	345
	2650	499	350	432
	8650	787	474	646
	4150	590	364	488
	8650	768	469	633
	5150	638	370	517
	8650	787	474	646
	8650	768	469	634
	10400	840	501	688
	16900	1050	599	847
	10400	836	481	676
	12150	902	547	742
	6150	657	447	562

	7400	734	511	633
	6150	660	446	564
	8650	768	452	625
2600		354	262	313
100		401	291	351
2600		365	250	313
	400	430	298	371
850		396	310	358
850		408	289	354
	400	421	310	371
2600		365	250	313
	400	430	298	371
100		418	329	378
100		403	283	349
100		425	279	360
	1900	507	334	429
	2650	523	351	446
100		405	257	338
3100		340	245	297
3100		342	243	297
1350		374	286	334
1350		388	271	335
	1400	460	330	401
1100		379	271	331
100		416	287	358
3100		340	245	297
1100		372	280	331
850		381	299	344
2100		361	262	316
3100		342	243	297
600		403	272	344
1350		374	286	334
1350		388	271	335
5350		211	182	198
2850		352	258	310
3100		342	243	297
1350		374	286	334
1350		388	271	335
3100		331	240	290
3350		330	239	289
850		401	289	351
1350		391	275	339
	900	449	319	390
	900	430	341	390
	1900	484	336	417
	900	435	344	394
	900	517	351	442
	3400	520	391	462
	1900	447	372	413

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635	370	515.8	734	511	633
556	348	462.4	660	446	563.7
681	391	550.5	768	452	625
272	184	232.4	354.3	261.8	312.7
334.3	211.2	278.9	401	290.6	351.3
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
323.7	227.6	280.5	396.3	310.3	358.2
335.2	207.2	277.6	407.6	288.8	354.1
332	220.9	282	421	310	371
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
335.4	235.6	290.5	418.2	329.4	378.2
327.2	207.7	273.4	402.8	282.7	348.8
346.3	202.5	281.6	425.2	279.3	359.5
419	253	344.3	506.7	333.8	428.9
434	265	358	523	351.1	445.6
321	213	272.4	404.7	256.6	338.1
259.8	171.2	219.9	339.8	244.6	297
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
372	240	312.6	459.5	330.5	401.4
295.1	203.2	253.7	379.2	271.3	330.6
340.4	215.5	284.2	415.9	287	357.9
259.8	171.2	219.9	339.8	244.6	297
300.9	196.7	254	372	280.4	330.8
315	214	269.6	381.3	298.8	344.2
307	192	255.2	360.5	262	316.2
261.7	170	220.4	342.1	242.9	297.5
333.9	197.2	272.4	403.3	271.8	344.1
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
155	134	145.6	211	182	198
270	181	230	351.9	257.7	309.5
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
268	179	228	331	240	290
266	162	219.2	330	239	289
328.2	217.8	278.5	400.9	289.4	350.7
339.6	206.8	279.8	391.3	275	339
372	238	311.7	449	319	390.5
339.6	244.4	296.7	429.8	341.3	390
407	248	335.4	484	336	417.4
343.7	246.1	299.7	434.6	343.6	393.7
422	248	343.7	517	351	442.3
416	281	355.2	520.1	390.6	461.8
354	267	314.8	446.9	371.8	413.1

2017-FFP\_004696

N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	2.9	2.9
N	3.7	3.7
N	4	4
N	3.6	3.6
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	3.8	3.8
N	2.2	2.2
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8

2017-FFP\_004698





## EPA\_UNR EPA\_UNR EPA\_ADJ EPA\_PHEV Label Submitter

[illegible]

[illegible]



















**To:** DavidA Wright/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 8/23/2012 12:05:06 PM  
**Subject:** RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,

Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, August 22, 2012 3:54 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace

Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Thur 8/23/2012 1:09:20 PM  
**Subject:** RE: Request for US06 Drive Trace

Mike,

Thanks for your reply, I look forward to receiving the data once it has been provided by the factory. Please let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/23/2012 08:05 AM  
Subject: RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, August 22, 2012 3:54 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace

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Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Thur 8/23/2012 1:09:20 PM  
**Subject:** RE: Request for US06 Drive Trace

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U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
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734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** DavidA Wright/AA/USEPA/US@EPA  
**Cc:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 08/23/2012 08:05 AM  
**Subject:** RE: Request for US06 Drive Trace

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Regards,  
Mike

**From:** DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
**Sent:** Wednesday, August 22, 2012 3:54 PM  
**To:** Giles, Michael (EEO)  
**Cc:** Jim Snyder  
**Subject:** Request for US06 Drive Trace

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Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

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Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 8/23/2012 1:50:01 PM  
**Subject:** RE: VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB

Hi Jim,

I should clarify that I have described Audi Q5 in this Application but have not yet submitted E85 test data for the model. We anticipate data in the coming weeks, at which time you had mentioned possibly selecting it for EVAP confirmatory testing to coincide with the already selected A5 Cabrio EVAP confirmatory tests from this test group.

Considering that the certificate would be conditional with or without Q5 included, I propose the Certificate be issued as requested (with Q5) to allow vehicles to be Labeled and shipped immediately IF we receive a test waiver from you for the E85 exhaust tests.

Sorry for the confusion.

Bill

From: Rodgers, William (EEO)  
Sent: Wednesday, August 22, 2012 3:44 PM  
To: 'Jim Snyder' (Snyder.Jim@epamail.epa.gov)  
Cc: Giles, Michael; Thomas, Richard (EEO); Kata, Leonard (EEO)  
Subject: VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB

Hello Jim,

I have submitted the Initial Application and confirmatory test Decision Information for the following 2013 Audi flex-fuel Test Group/Evaporative Family. All tests have been submitted including manufacturer confirmatory tests. This test group was recently selected for EPA confirmatory EVAP testing.

As previously discussed, this flex-fuel test group uses carry across gasoline test data from the test group DADXV02.03UB which has been verified to have identical engine and transmission programming for gasoline operation.

We are requesting a conditional certificate be issue as soon as possible due to a very tight port release deadline as early as August 31st.

Test Group: DADXJ02.0FUB

Evap. Family: DADXR0140B8F

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 8/23/2012 2:34:02 PM  
**Subject:** MPG & CO2 calculator attached  
[5-cycle 2012 CO2-MPG calcs-for release.8-8-2012.xlsm](#)

Richard,

Here you go.

## Derived 5-cycle MPG Calculations

21.7      32.4      25.4878  
17      23      20

Enter unadjusted MPG Values:

City mpg (round to 0.1mpg**)	Hwy mpg (round to 0.1mpg**)	Calculated unadjusted combined
------------------------------------	-----------------------------------	--------------------------------------

Ford Index 238	36.4	57.6	43.62547
	32.3	51.8	38.8876
	31.3	50.2	37.6846
	31.5	50.6	37.9455

### 2008 MPG Factors:

ref. 40 CFR 600.210-08 E15

\*\*Round to 4 decimal places if more than one test was performed fo

Enter mfr unadjusted CO2 Values:

City CO2 (round to 0.1 gpm**)	Hwy CO2 (round to 0.1 gpm**)	Mfr's CO2 Combined value	EPA Calculated unadjusted combined
-------------------------------------	------------------------------------	--------------------------------	--

**Derived  
5-cycle  
ONLY!!!**

### FE Label Module

Verify--error (?)	Gasoline	VW Q7
correct (?)	Gasoline	
	Gasoline	
	Gasoline	
	<b>Diesel</b>	
	<b>Diesel</b>	

460.9	296.5	386.9	386.9200
616	357	291.5	499.4500
340	221	<b>286.5</b>	286.4500
333.4	225.2	286.3	284.7100
450	248	343.7	359.1000
450	248	343.7	359.1000

\*\*Round to whole gram/mile if only one test was performed for the m

City Intercept: 0.00326  
City Slope: 1.1805  
Hwy Intercept: 0.00138  
Hwy Slope: 1.3466

Enter Adj Combined  
MPG

Ann Fuel Costs	<b>18</b>	0.05556
Price/gal Reg	3.7	
Price /gal Mid c	3.85	
Price/gal Prem	3.95	
Price/gal Diese	3.95	
Price/gal E85	3.25	
Price/gal CNG	2.15	

26.7092      43.0035      32.1995

**Mileage correction when a test vehicle exceeds 6200**

City mpg (round to 0.1mpg)	System miles at start of City test (round to whole no.)	Hwy mpg (round to 0.1mpg)	System miles at start of City test (round to whole no.)
20	4000	30	4000
20	5000	30	5000
20	5900	30	5900
20	6000	30	6000
20	6200	30	6200
20	6500	30	6500
20	7000	30	6200
20	7,200	30	7,200
20	11,200	30	11,200
20	16,200	30	16,200
20	54,000	30	54,000
20	9,000	30	9,000
20	9,000	30	9,000
20	9,000	30	9,000

(round input to 0.1mpg)

(round input to 0.0001m  
Per current regulations  
Revised in 74 FR 6137, e

**2007 FE Label**

**2008-2010 FE Label method**

**2011 FE Label method**

Adjusted City mpg   Adjusted Hwy mpg   Adjusted Combined

Derived 5-cycle City   Derived 5-cycle Hwy   Adjusted Combined

Derived 5-cycle City   Derived 5-cycle Hwy

32.760   44.928   37.3068  
29.070   40.404   33.2697  
28.170   39.156   32.2406  
28.350   39.468   32.4654

**28.019   40.397   32.5000**  
**25.121   36.533   29.2301**  
**24.405   35.460   28.3878**  
**24.549   35.729   28.5720**

28.01880   40.39674  
25.12122   36.53350  
**24.40533   35.46011**  
**24.54880   35.72877**

r the model type, ref 600.206-12(a)(2)

**2013 Rounded to 3 decimals:**

**2013 Rounded to 1 decimal**

**2013 Rounded to whole nos**

Adjusted City CO2   Adjusted Hwy CO2   Adjusted Combined CO2

Adjusted City CO2   Adjusted Hwy CO2   Adjusted Combined CO2

Adjusted City CO2   Adjusted Hwy CO2

573.055   411.495   500.3530  
756.151   492.965   637.7173  
430.333   309.827   376.1053  
422.541   315.483   374.3649  
564.402   347.964   467.0049  
564.402   347.964   467.0049

573.100   411.500   500.3800  
756.200   493.000   637.7600  
430.300   309.800   376.0750  
422.500   315.500   374.3500  
564.400   348.000   467.0200  
564.400   348.000   467.0200

573.000   411.000  
756.000   493.000  
430.000   310.000  
423.000   315.000  
564.000   348.000  
564.000   348.000

odel type, ref 600.206-12(a)(1)

Annual   Unrounded  
0.0556 Fuel Cost   5 Year Cost  
\$3,086 Regular   \$15,430  
\$3,211 Mid-Grade   \$16,055  
\$3,294 Premium   \$16,470  
\$3,294 Diesel   \$16,470  
\$2,710 E85   \$13,550  
\$1,793 CNG   \$8,965

SIL CALCS			
SIL		non-SIL	
% usage	mpg	% usage	mpg
0.73	67.9	0.27	65

miles

City mpg adjusted back to 4000 mi mpg	Hwy mpg adjusted back to 4000 mi mpg	City Percent adjusted	Hwy Percent adjusted
20.00	30.00	0.00%	0.00%
19.90	29.84	0.52%	0.52%
19.80	29.70	0.99%	0.99%
19.79	29.69	1.04%	1.04%
19.77	29.66	1.14%	1.14%
19.74	29.61	1.30%	1.30%
19.69	29.66	1.55%	1.14%
19.67	29.50	1.65%	1.65%
19.27	28.91	3.64%	3.64%
18.80	28.19	6.02%	6.02%
15.84	23.76	20.79%	20.79%
19.49	29.23	2.56%	2.56%
19.49	29.23	2.56%	2.56%
19.49	29.23	2.56%	2.56%

Percent Difference  
11,200-6200 mi  
2.50%

pg)  
 at 600.210-08(a)(2)(i) & (ii)  
 ffective Jan 25, 2010)

**Calculated CO2 (using 8887 gr CO2/gal gasoline)**

Adjusted Combined	Unadj City	Unadj Hwy	Unadj Combined	City Percent difference	Hwy Percent difference	Combined Percent difference
<b>32.50005</b>	244.1	154.3	203.7			
<b>29.23010</b>	275.1	171.6	228.5	-12.7%	-11.2%	-12.2%
<b>28.38782</b>	283.9	177.0	235.8	-3.2%	-3.2%	-3.2%
<b>28.57204</b>	282.1	175.6	234.2			

ounded to whole nos

**MFR Values**

Adjusted Combined CO2	Adjusted City CO2	Adjusted Hwy CO2	Adjusted Combined CO2
500.0000	573	412	500
638.0000	756	493	638
376.0000	478	344	417
374.0000	478	344	417
467.0000	517	351	443
467.0000	517	351	443

Ave FE
67.117





**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** "Giles, Michael" [michael.giles@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Fri 8/24/2012 2:59:46 PM  
**Subject:** RE: VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB

Bill, I talked to Mike about this but here's the story. Even though it is a Conditional Cert, I don't think I can include the Q5 on the certificate until you have at least submitted data on the Q5 since it will be the new EDV. The Conditional provision is only intended for vehicles pending a confirmatory test. I will deny the cert request and you can re-submit it without the Q5.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**Date:** 08/23/2012 09:50 AM  
**Subject:** RE: VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB

Hi Jim,  
I should clarify that I have described Audi Q5 in this Application but have not yet submitted E85 test data for the model. We anticipate data in the coming weeks, at which time you had mentioned possibly selecting it for EVAP confirmatory testing to coincide with the already selected A5 Cabrio EVAP confirmatory tests from this test group.  
Considering that the certificate would be conditional with or without Q5 included, I propose the Certificate be issued as requested (with Q5) to allow vehicles to be Labeled and shipped immediately IF we receive a test waiver from you for the E85 exhaust tests.

Sorry for the confusion.  
Bill

**From:** Rodgers, William (EEO)  
**Sent:** Wednesday, August 22, 2012 3:44 PM  
**To:** 'Jim Snyder' (Snyder.Jim@epamail.epa.gov)  
**Cc:** Giles, Michael; Thomas, Richard (EEO); Kata, Leonard (EEO)  
**Subject:** VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB

Hello Jim,  
I have submitted the Initial Application and confirmatory test Decision Information for the following 2013 Audi flex-fuel Test Group/Evaporative Family. All tests have been submitted including manufacturer confirmatory tests. This test group was recently selected for EPA confirmatory EVAP testing.

As previously discussed, this flex-fuel test group uses carry across gasoline test data from the test group DADXV02.03UB which has been verified to have identical engine and transmission programming for gasoline operation.

We are requesting a conditional certificate be issue as soon as possible due to a very tight port release deadline as early as August 31st.

Test Group: DADXJ02.0FUB  
Evap. Family: DADXR0140B8F

Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Fri 8/24/2012 5:49:48 PM  
**Subject:** 2013 FE Guide - data attached  
VW Group 2013 FEGuide-all rel dates-no-sales-8-24-2012.xlsx

Richard,

Here you go. Please disregard the error message regarding the sales =1-5 vehicles.

It looks like the Gallardo Spyder still has a CO2 error---otherwise OK. Thanks much.

EPA com	VERIFY cc	Model Yr (Mfr Name	Division (1	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
Diesel;		2013 Audi	Audi	A3	ADX	73	2.0 4
		2013 Audi	Audi	A3	ADX	59	2.0 4
		2013 Audi	Audi	A3	ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013 Audi	Audi	A4	ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	39	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013 Audi	Audi	A6	ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled; Y		2013 Audi	Audi	A8	ADX	128	3.0 6
		2013 Audi	Audi	A8	ADX	98	4.0 8
Relabeled; Y		2013 Audi	Audi	A8L	ADX	129	3.0 6
		2013 Audi	Audi	A8L	ADX	97	4.0 8
		2013 Audi	Audi	A8L	ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013 Audi	Audi	Q5	ADX	91	2.0 4
Hybrid;		2013 Audi	Audi	Q5 Hybrid	ADX	95	2.0 4
Diesel;		2013 Audi	Audi	Q7	ADX	53	3.0 6
		2013 Audi	Audi	Q7	ADX	61	3.0 6
		2013 Audi	Audi	RS5	ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
		2013 Audi	Audi	S4	ADX	42	3.0 6
		2013 Audi	Audi	S4	ADX	45	3.0 6
		2013 Audi	Audi	S5	ADX	43	3.0 6
		2013 Audi	Audi	S5	ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013 Audi	Audi	S6	ADX	48	4.0 8
		2013 Audi	Audi	S7	ADX	47	4.0 8
		2013 Audi	Audi	S8	ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe quattro	ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster quattro	ADX	67	2.0 4
		2013 Audi	Audi	TTRS Coupe	ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental Flying Spur	BGT	110	6.0 12
		2013 Bentley	Bentley Motors	Continental BGT	BGT	108	4.0 8
		2013 Bentley	Bentley Motors	Continental BGT	BGT	113	6.0 12
		2013 Bentley	Bentley Motors	Continental BGT C	BGT C	107	4.0 8
		2013 Bentley	Bentley Motors	Continental BGT C	BGT C	111	6.0 12
		2013 Bentley	Bentley Motors	Continental Supersports Continental	BGT	112	6.0 12
		2013 Bentley	Bentley Motors	Mulsanne BEX	BEX	96	6.8 8
		2013 Bugatti	Bugatti	Veyron	BGT	88	8.0 16
		2013 Lamborghini	Lamborghini	Aventador Coupe	BNL	92	6.5 12
		2013 Lamborghini	Lamborghini	Aventador Roadster	BNL	93	6.5 12
		2013 Lamborghini	Lamborghini	Gallardo Coupe	BNL	30	5.2 10
Error - sale Y		2013 Lamborghini	Lamborghini	Gallardo CNLX	BNL	32	5.2 10

	2013	Lamborghini	Lamborghini	Gallardo Spyder	31	5.2	10
Error - sales	2013	Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel;	2013	Volkswagen	Volkswagen	BEETLE VWX	94	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	19	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE VWX	84	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	89	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	17	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE VWX	27	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	20	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	85	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	90	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	18	2.5	5
	2013	Volkswagen	Volkswagen	6C VWX	1	2.0	4
	2013	Volkswagen	Volkswagen	6C VWX	4	2.0	4
	2013	Volkswagen	Volkswagen	6C VWX	2	3.6	6
	2013	Volkswagen	Volkswagen	6C 4MOTION VWX	3	3.6	6
	2013	Volkswagen	Volkswagen	EOS VWX	21	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF VWX	72	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF VWX	81	2.0	4
	2013	Volkswagen	Volkswagen	GOLF VWX	16	2.5	5
	2013	Volkswagen	Volkswagen	GOLF VWX	26	2.5	5
	2013	Volkswagen	Volkswagen	Golf R VWX	57	2.0	4
	2013	Volkswagen	Volkswagen	GTI VWX	22	2.0	4
	2013	Volkswagen	Volkswagen	GTI VWX	23	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta VWX	71	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	50	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	86	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	87	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta VWX	80	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	51	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	15	2.5	5
	2013	Volkswagen	Volkswagen	Jetta VWX	25	2.5	5
Hybrid;	2013	Volkswagen	Volkswagen	Jetta Hybrid VWX	100	1.4	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT V WAGEN	74	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT V WAGEN	79	2.0	4
	2013	Volkswagen	Volkswagen	JETTA SPORT V WAGEN	14	2.5	5
	2013	Volkswagen	Volkswagen	JETTA SPORT V WAGEN	24	2.5	5
Diesel;	2013	Volkswagen	Volkswagen	Passat VWX	62	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Passat VWX	64	2.0	4
	2013	Volkswagen	Volkswagen	Passat VWX	83	2.5	5
	2013	Volkswagen	Volkswagen	Passat VWX	82	2.5	5
	2013	Volkswagen	Volkswagen	Passat VWX	63	3.6	6
	2013	Volkswagen	Volkswagen	TIGUAN VWX	68	2.0	4
	2013	Volkswagen	Volkswagen	TIGUAN VWX	56	2.0	4
	2013	Volkswagen	Volkswagen	TIGUAN 4MOTION	55	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Touareg VWX	54	3.0	6
	2013	Volkswagen	Volkswagen	Touareg VWX	78	3.6	6
Hybrid;	2013	Volkswagen	Volkswagen	Touareg Hybrid VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S6)	30	42	34			39.0935	59.3437	46.1856
Auto(AM-S6)	21	28	24			26.6	38.2	30.8102
Manual(M	21	30	24			25.3	40.3	30.3902
Auto(AM-S	21	28	24			27.2	37.1	30.9119
Auto(AV-Si	24	31	26			30.1185	44.4328	35.2251
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Manual(M6)	22	32	26			27.624	43.9699	33.1736
Auto(AV-S8)	24	31	26			30.1185	44.4328	35.2251
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Manual(M6)	22	32	26			27.624	43.9699	33.1736
Auto(AV-S8)	25	33	28			31.4	46.9	36.8857
Auto(S8)	20	30	24			25.6856	40.5676	30.7641
Auto(S8)	18	27	22			23.1369	38.1	28.1037
Auto(S8)	18	28	21			22.5575	37.3745	27.4556
Auto(S8)	18	28	21	ded), 600.314-08 states label values must not change for entire model year, except for 600-507(a) and 600-314-08(				
Auto(S8)	17	28	21			21.7885	38.4	27.0553
Auto(S8)	18	28	21	ded), 600.314-08 states label values must not change for entire model year, except for 600-507(a) and 600-314-08(				
Auto(S8)	16	26	19			19.8586	33.9	24.4081
Auto(S8)	13	21	16			15.9	25.7	19.1935
Auto(S8)	20	27	23			25.2	37.3	29.5075
Auto(S8)	20	28	23			24.8	38.6	29.5548
Auto(S8)	24	30	26			30.4	39.9	34.048
Auto(S8)	19	28	22			22.8	39.1	28.0649
Auto(S8)	16	22	18			19.2813	29.852	22.9361
Auto(AM-S7)	16	23	18			19.1	30	22.8332
Auto(AM-S7)	16	22	18			19.2	28.9	22.6159
Auto(AM-S7)	18	28	21			22.4	35.8	26.9372
Manual(M6)	17	26	20			20	33.4	24.4063
Auto(AM-S7)	18	28	21			22.4	35.8	26.9372
Manual(M6)	17	26	20			20	33.4	24.4063
Auto(AM-S7)	18	26	21			22.1	34.7	26.4165
Auto(AM-S7)	17	27	20			20.7539	35.335	25.4866
Auto(AM-S7)	17	27	20			20.7539	35.335	25.4866
Auto(S8)	15	26	19			19	33.3	23.5511
Auto(AM-S6)	22	31	26			28.4068	42.2579	33.3217
Auto(AM-S6)	22	31	26			28.4068	42.2579	33.3217
Manual(M6)	18	25	20			21.2	34.2	25.5746
Auto(S6)	11	19	14			13.7	24.6	17.112
Auto(S8)	15	24	18			19	33.5	23.5959
Auto(S6)	12	19	14			13.9	24.7	17.3049
Auto(S8)	14	24	17			17.4	30.8	21.6358
Auto(S6)	11	19	14			13.7	24.6	17.112
Auto(S6)	12	19	14			13.9	24.7	17.3049
Auto(S8)	11	18	13			12.9	21.8	15.8033
Auto(AM-S7)	8	15	10			10	17.9	12.4782
Auto(AM-S7)	11	18	13			12.6	25.2	16.2581
Auto(AM-S7)	10	16	12			11.5	21.2	14.4817
Auto(AM-S6)	13	20	16			16.1	25.4	19.276
Manual(M	12	20	15	re not offered for sale in the US. Please revise Verify as needed.				
						14	24	17.2308

Auto(AM-S6)	13	20	16	16	25.4	19.197
Manual(M6)	12	20	14	13	22.8	16.0722
re not offered for sale in the US. Error in combined unrounded unadjusted CO2 value, we calculate 550.5. Please rev						
Auto(AM-S6)	29	39	32	37.3	55.3	43.7011
Auto(AM-S6)	22	30	25	26.5	42.0656	31.7942
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M5)	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S6)	21	29	24	26.8	40.2092	31.532
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S6)	22	31	25	26.977	42.4936	32.2814
Manual(M6)	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S6)	22	30	25	27.5	41.5	32.4219
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Manual(M6)	19	27	22	23.9	37.1	28.456
Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229
Manual(M6)	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M5)	24	34	28	28.8	46.2	34.6771
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Manual(M6)	22	33	26	26.5556	44.9945	32.56
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S7)	42	49	45	57.2	66.2	60.9274
Auto(AM-S6)	29	39	33	37.6	56.2	44.1798
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	30	40	34	37.9	56.8	44.5744
Manual(M6)	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M5)	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S6)	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631



City	Model	Fuel	City	Highway	Unrd Comb	Unr	Guzzler?	Air Aspir	IAir Aspir	Trans	Trans Des	Trans, Otr	# Gears
29.8946	41.5209	34.2046	TC	Turbocharg	Ad	SA	Automated Manual-	Selectable	(e.g. Au				
21.3388	27.7919	23.8286	TC	Turbocharg	Ad	SA	Automated Manual-	Selectable	(e.g. Au				
20.8146	29.9953	24.1394	TC	Turbochar	M		Manual		6				
20.891	28.1035	23.6187	TC	Turbochar	AMS		Automate		6				
23.6355	30.6684	26.3554	TC	Turbochar	SCV		Selectable		8				
20.3576	29.8271	23.7508	TC	Turbochar	SA		Semi-Auto		8				
22.2425	32.0861	25.8049	TC	Turbocharg	Ad		Manual		6				
23.6355	30.6684	26.3554	TC	Turbocharg	Ad	SA	Selectable Continuously Variable		8 (e.g. C				
20.3576	29.8271	23.7508	TC	Turbochar	SA		Semi-Auto		8				
20.3576	29.8271	23.7508	TC	Turbocharg	Ad		Semi-Automatic		8				
22.2425	32.0861	25.8049	TC	Turbocharg	Ad		Manual		6				
24.5044	32.5529	27.5721	TC	Turbocharg	Ad	SA	Selectable Continuously Variable		8 (e.g. C				
20.3576	29.8271	23.7508	TC	Turbocharg	Ad		Semi-Automatic		8				
18.3949	27.2332	21.5408	SC	Supercharg	Ad		Semi-Automatic		8				
17.8058	27.5484	21.1758	SC	Superchar	SA		Semi-Auto		8				
e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in combined unr	17.8058	27.5484	21.1758	SC	Superchar	SA	Semi-Auto		8				
17.2616	28.4347	20.9695	TC	Turbocharg	Ad		Semi-Automatic		8				
e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in combined unr	17.8058	27.5484	21.1758	SC	Superchar	SA	Semi-Auto		8				
16.0273	25.8053	19.3219	TC	Turbocharg	Ad		Semi-Automatic		8				
13.1387	20.6025	15.6978	NA	Naturally Aspirated			Semi-Automatic		8				
19.9584	26.6824	22.5112	TC	Turbocharg	Ad		Semi-Automatic		8				
19.7289	28.2351	22.823	TC	Turbocharg	Ad		Semi-Automatic		8				
24.0075	29.7936	26.3065	TC	Turbocharg	Ad		Semi-Automatic		8				
18.74	27.62	21.9099	TC	Turbocharg	Ad		Semi-Automatic		8				
15.522	21.5458	17.7559	SC	Supercharg	Ad		Semi-Automatic		8				
15.7409	23.3075	18.4339	NA	Naturally Aspirated	AMS		Automated Manual-	Selectable	7(e.g. Au				
15.8793	22.1836	18.2078	NA	Naturally Aspirated	AMS		Automated Manual-	Selectable	7(e.g. Au				
18.117	27.558	21.419	SC	Supercharg	Ad	SA	Automated Manual-	Selectable	7(e.g. Au				
17.0438	26.023	20.1767	SC	Supercharg	Ad		Manual		6				
18.117	27.558	21.419	SC	Supercharg	Ad	SA	Automated Manual-	Selectable	7(e.g. Au				
17.0438	26.023	20.1767	SC	Supercharg	Ad		Manual		6				
17.6699	25.953	20.6333	SC	Supercharg	Ad	SA	Automated Manual-	Selectable	7(e.g. Au				
16.761	26.9697	20.2022	TC	Turbocharg	Ad	SA	Automated Manual-	Selectable	7(e.g. Au				
16.761	26.9697	20.2022	TC	Turbocharg	Ad	SA	Automated Manual-	Selectable	7(e.g. Au				
15.2801	25.5632	18.6574	TC	Turbocharg	Ad		Semi-Automatic		8				
22.407	31.1674	25.6515	TC	Turbocharg	Ad	SA	Automated Manual-	Selectable	7(e.g. Au				
22.407	31.1674	25.6515	TC	Turbocharg	Ad	SA	Automated Manual-	Selectable	7(e.g. Au				
17.751	25.2021	20.4751	TC	Turbocharg	Ad		Manual		6				
11.2476	18.7327	13.7134	TC	Turbocharg	Ad		Semi-Automatic		6				
15.0109	24.4645	18.1706	TC	Turbocharg	Ad		Semi-Automatic		8				
11.5043	18.877	13.9574	TC	Turbocharg	Ad		Semi-Automatic		6				
14.0639	23.9773	17.2766	TC	Turbocharg	Ad		Semi-Automatic		8				
11.2476	18.7327	13.7134	TC	Turbocharg	Ad		Semi-Automatic		6				
11.5043	18.877	13.9574	TC	Turbocharg	Ad		Semi-Automatic		6				
10.5402	17.7129	12.8889	TC	Turbocharg	Ad		Semi-Automatic		8				
8.4232	14.7698	10.4424	TC	Turbocharg	Ad	SA	Automated Manual-	Selectable	7(e.g. Au				
10.6055	18.4729	13.1199	NA	Naturally Aspirated	AMS		Automated Manual-	Selectable	7(e.g. Au				
9.7957	16.2453	11.9264	NA	Naturally Aspirated	AMS		Automated Manual-	Selectable	7(e.g. Au				
13.4655	19.7573	15.718	NA	Naturally Aspirated	AMS		Automated Manual-	Selectable	7(e.g. Au				
12.0883	19.9831	14.7021	NA	Naturally AM			Manual		6				

13.3954	19.7741	15.6701	G	NA	Naturally Aspirated	Automated Manual- Selectable	e.g. Au
11.3588	19.5451	14.1465	G	NA	Naturally Aspirated	Manual	6
28.6469	38.87	32.4925		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
22.0202	29.5574	24.8746		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517		TC	Turbocharged	Manual	6
22.2864	28.5683	24.7338		NA	Naturally Aspirated	Semi-Automatic	6
21.7201	30.6767	25.0054		NA	Naturally Aspirated	Manual	5
21.1383	28.6751	23.9738		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517		TC	Turbocharged	Manual	6
21.2302	26.9749	23.4804		NA	Naturally Aspirated	Semi-Automatic	6
21.8706	31.0367	25.2227		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
20.8232	31.7255	24.6324		TC	Turbocharged	Manual	6
17.4935	26.5716	20.6716		NA	Naturally Aspirated	Semi-Automatic	6
16.9415	25.219	19.8774		NA	Naturally Aspirated	Semi-Automatic	6
21.7634	30.1121	24.8658		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
19.278	26.8882	22.0917		TC	Turbocharged	Manual	6
24.2237	32.5108	27.3624		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
21.2839	30.8324	24.7304		TC	Turbocharged	Manual	6
29.8946	41.5209	34.2046		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
23.7854	31.6043	26.7652		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
23.1009	29.1554	25.4822		NA	Naturally Aspirated	Semi-Automatic	6
24.3944	33.6309	27.8344		NA	Naturally Aspirated	Manual	5
29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
21.8931	32.6043	25.6912		TC	Turbocharged	Manual	6
23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
41.6792	48.86	44.6309		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
28.8556	39.4682	32.8278		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
30.4633	40.2057	34.1916		TC	Turbocharged	Automated Manual- Selectable	e.g. Au
30.8024	42.6219	35.1943		TC	Turbocharged	Manual	6
22.1078	30.6611	25.2814		NA	Naturally Aspirated	Semi-Automatic	6
21.8993	32.1378	25.5642		NA	Naturally Aspirated	Manual	5
19.7174	27.8048	22.6868		NA	Naturally Aspirated	Automated Manual- Selectable	e.g. Au
20.6233	26.0617	22.7606		TC	Turbocharged	Semi-Automatic	6
18.1488	26.2617	21.0791		TC	Turbocharged	Manual	6
20.402	25.8545	22.5412		TC	Turbocharged	Semi-Automatic	6
19.649	28.9961	22.9829		TC	Turbocharged	Semi-Automatic	8
17.0411	22.7325	19.2048		NA	Naturally Aspirated	Semi-Automatic	8
19.8843	23.7762	21.4655		SC	Supercharged	Semi-Automatic	8

Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Y	omated M	N	Manual with P	paddles) 2-Wheel DDAD	XV02.00U5N	5	DU	Diesel, ultra low s	
Y	omated M	N	Manual with P	paddles) 2-Wheel DDAD	XV02.03PA	10	GP	Gasoline (Premium	
N	N	F	2-Wheel DDAD	XV02.0	10	GP	GP	Gasoline (F	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV02.0	10	GP	Gasoline (F	
Y	MT with padd	N	les) F 2-Wheel DDAD	XV02.0	10	GP	GP	Gasoline (F	
Y	N	A	All Wheel IDAD	XV02.0	10	GP	GP	Gasoline (F	
N	N	A	All Wheel IDAD	XV02.03UB	10	GP	GP	Gasoline (Premium	
Y	MT with padd	N	les) F 2-Wheel DDAD	XV02.03UB	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV02.0	10	GP	GP	Gasoline (F	
Y	N	A	All Wheel IDAD	XV02.03UB	10	GP	GP	Gasoline (Premium	
N	N	A	All Wheel IDAD	XV02.03UB	10	GP	GP	Gasoline (Premium	
Y	MT with padd	N	les) F 2-Wheel DDAD	XV02.03UB	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV02.03UB	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XJ03.03UF	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XJ03.C	10	GP	GP	Gasoline (F	
Y	ounded unadj	N	CO2 value, we calculate 323.8. Error in combined unrounded adjusted CO2 value, we calculate 4	All Wheel IDAD	XJ03.C	10	GP	Gasoline (F	
Y	N	A	All Wheel IDAD	XV04.03UJ	10	GP	GP	Gasoline (Premium	
Y	ounded unadj	N	CO2 value, we calculate 323.8. Error in combined unrounded adjusted CO2 value, we calculate 4	All Wheel IDAD	XJ03.C	10	GP	Gasoline (F	
Y	N	A	All Wheel IDAD	XV04.03UJ	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV06.3UA8	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV02.03UB	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XT02.04UB	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XT02.0HUB	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XT03.03UG	5	DU	Diesel, ultra low s		
Y	N	A	All Wheel IDAD	XT03.0TLF	10	GP	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV04.23UL	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV04.23UL	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XJ03.03UF	10	GP	Gasoline (Premium	
N	N	A	All Wheel IDAD	XJ03.03UF	10	GP	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XJ03.03UF	10	GP	Gasoline (Premium	
N	N	A	All Wheel IDAD	XJ03.03UF	10	GP	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XJ03.03UF	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV04.03UJ	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV04.03UJ	10	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV04.03UJ	10	GP	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV02.03UA	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV02.03UA	10	GP	Gasoline (Premium	
N	N	A	All Wheel IDAD	XV02.53UK	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV06.0501	85	333	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV04.03UJ	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV06.0501	85	333	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV04.03UJ	10	GP	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV06.0501	85	333	GP	Gasoline (Premium	
Y	N	A	All Wheel IDAD	XV06.0501	85	333	GP	Gasoline (Premium	
Y	N	R	2-Wheel DDAD	XV06.84LA	10	GP	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	TV08.0V16	10	GPR	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV06.5LR3	10	GPR	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV06.5LR3	10	GPR	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles) All Wheel IDAD	XV05.2LR8	10	GP	Gasoline (Premium	
N	N	A	All Wheel IDAD	XV05.	10	GP	GP	Gasoline (I	

Yomated Manual with Paddles)	All Wheel Drive	DAD XV05.2LR8	10		GP	Gasoline (Premium
N N A	All Wheel Drive	DAD XV05.	10		GP	Gasoline (I
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.0U5N		5	DU	Diesel, ultra low s
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
N N F	2-Wheel Drive	DVFXV02.0U5N		5	DU	Diesel, ultra low s
N N F	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
Y N F	2-Wheel Drive	DVFXV02.5U3A	10		G	Gasoline (Regular
N N F	2-Wheel Drive	DVFXV02.5U3M	10		G	Gasoline (Regular
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
N N F	2-Wheel Drive	DVFXV02.0U5N		5	DU	Diesel, ultra low s
N N F	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
Y N F	2-Wheel Drive	DVFXV02.5U3A	10		G	Gasoline (Regular
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
N N F	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
Y N F	2-Wheel Drive	DVFXV03.6U46	10		GP	Gasoline (Premium
Y N A	All Wheel Drive	DVFXV03.6U46	10		GP	Gasoline (Premium
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.03SA	10		GP	Gasoline (Premium
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.0U5N		5	DU	Diesel, ultra low s
N N F	2-Wheel Drive	DVFXV02.0U5N		5	DU	Diesel, ultra low s
Y N F	2-Wheel Drive	DVFXV02.5U3A	10		G	Gasoline (Regular
N N F	2-Wheel Drive	DVFXV02.5U3M	10		G	Gasoline (Regular
N N A	All Wheel Drive	DAD XV02.03UA	10		GP	Gasoline (Premium
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
N N F	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.0U5N		5	DU	Diesel, ultra low s
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
Y N F	2-Wheel Drive	DVFXV02.0U36	10		G	Gasoline (Regular
N N F	2-Wheel Drive	DVFXV02.0U36	10		G	Gasoline (Regular
N N F	2-Wheel Drive	DVFXV02.0U5N		5	DU	Diesel, ultra low s
N N F	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
Y N F	2-Wheel Drive	DVFXV02.5U3A	10		G	Gasoline (Regular
N N F	2-Wheel Drive	DVFXV02.5U3M	10		G	Gasoline (Regular
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV01.4PHE	10		GP	Gasoline (Premium
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.0U5N		5	DU	Diesel, ultra low s
N N F	2-Wheel Drive	DVFXV02.0U5N		5	DU	Diesel, ultra low s
Y N F	2-Wheel Drive	DVFXV02.5U3A	10		G	Gasoline (Regular
N N F	2-Wheel Drive	DVFXV02.5U3M	10		G	Gasoline (Regular
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV02.0U4S		5	DU	Diesel, ultra low s
N N F	2-Wheel Drive	DVFXV02.0U4S		5	DU	Diesel, ultra low s
Y N F	2-Wheel Drive	DVFXV02.5U3A	10		G	Gasoline (Regular
N N F	2-Wheel Drive	DVFXV02.5U3M	10		G	Gasoline (Regular
Yomated Manual with Paddles)	2-Wheel Drive	DVFXV03.6U41	10		GP	Gasoline (Premium
Y N F	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
N N F	2-Wheel Drive	DVFXV02.03UA	10		GP	Gasoline (Premium
Y N A	All Wheel Drive	DVFXJ02.03UA	10		GP	Gasoline (Premium
Y N A	All Wheel Drive	DAD XT03.02UG		5	DU	Diesel, ultra low s
Y N A	All Wheel Drive	DVFXXT03.6U76	10		GP	Gasoline (Premium
Y N A	All Wheel Drive	DVFXXT03.0HEV	10		GP	Gasoline (Premium

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MRC (15 ppm)	Not exempt		
MRC (15 ppm)	Not exempt		
MRC (15 ppm)	Not exempt	85	15
MRC (15 ppm)	Not exempt	85	15
MRC (15 ppm)	Not exempt	85	15
MRC (15 ppm)	Not exempt	85	15
MRC (15 ppm)	Not exempt	85	15
MRC (15 ppm)	Not exempt	85	15
MRC (15 ppm)	Not exempt	81	7
MRC (15 ppm)	Not exempt	81	7
MRC (15 ppm)	Not exempt	81	7
MRC (15 ppm)	Not exempt	81	7
MRC (15 ppm)	Not exempt	94	13
MRC (15 ppm)	Not exempt	94	13
MRC (15 ppm)	Not exempt	94	13
MRC (15 ppm)	Not exempt	94	13
MRC (15 ppm)	Not exempt	77	11
MRC (15 ppm)	Not exempt	94	15
MRC (15 ppm)	Not exempt	94	15
MRC (15 ppm)	Not exempt	94	15
MRC (15 ppm)	Not exempt	94	15
MRC (15 ppm)	Not exempt	94	15
MRC (15 ppm)	Not exempt	94	15
MRC (15 ppm)	Not exempt	94	15
MRC (15 ppm)	Not exempt	94	16
MRC (15 ppm)	Not exempt	94	16
MRC (15 ppm)	Not exempt	94	16
MRC (15 ppm)	Not exempt	94	16
MRC (15 ppm)	Not exempt	94	16
MRC (15 ppm)	Not exempt	94	16
MRC (15 ppm)	Not exempt	94	16
MRC (15 ppm)	Not exempt	94	16
MRC (15 ppm)	Not exempt	92	33
MRC (15 ppm)	Not exempt	92	33
MRC (15 ppm)	Not exempt	92	33
MRC (15 ppm)	Not exempt	92	33
MRC (15 ppm)	Not exempt	102	16
MRC (15 ppm)	Not exempt	102	16
MRC (15 ppm)	Not exempt	102	16
MRC (15 ppm)	Not exempt	102	16
MRC (15 ppm)	Not exempt	102	16
MRC (15 ppm)	Truck		
MRC (15 ppm)	Truck		
MRC (15 ppm)	Truck		
MRC (15 ppm)	Truck		
MRC (15 ppm)	Truck		
MRC (15 ppm)	Truck		

Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hwy Low'd CorCity2 Unadjusted
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding correction	
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C	
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values	
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v	
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unroun	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and	
2200	2200		
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched	
2600	2600		
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes	
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to	
2700	2700	S/S set to yes	
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrnd city CO2 value corrected, S	
3000	3000	S/S set to yes	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c	
2500	2500	corrected unadj unrounded highway and combined values	
2200	2200		
2600	2600	CO2 corrections, additional fuel costs in saving field, corrected Aug 14th	
3150	3150	CO2 corrections, again Aug 14th, Aug 23 CO2 rounding....adjusted whole CO2 from unadjusted	
3150	3150	CO2 corrections	
3150	3150	corrected city CO2 value, typo	
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected city unadj unrounded CO2, Aug 14th	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected unadj and adj CO2 values, Aug 14th	
2850	2850	CO2 corrections	
2850	2850	CO2 corrections	
3000	3000		
2200	2200	CO2 corrections, Aug 14th correction	
2200	2200	CO2 corrections, Aug 14th	
2850	2850		
4050	4050	corrected unadj unrnd combined CO2 value Aug 14th	9.5
3150	3150		
4050	4050	correct adj unrounded and rounded comb CO2 values Aug 14th	10.3
3350	3350		
4050	4050	corrected comb adj unrnd CO2 10	9.5
4050	4050	CO2 rounding correction on Aug 23rd	10.3
4400	4400		
5700	5700	corrected lock out to "yes" and AMS.	
4400	4400	lock up to YES., CO2 corrections Aug 14, S/S set to yes, CO2 rounding correction Aug 23rd	
4750	4750	adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes	
3550	3550	corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th	
3800	3800	CO2 rounding correction Aug 23rd	

3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
 4050 CO2 rounding Aug 23rd  
 1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
 2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 corrected CO2 values, corrected fuel cost over 5 years  
 2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
 2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
 2400 annual fuel cost corrected, post release 10 amd AMS used, corrected highway value from 28 t  
 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 CO2 corrections, fuel spending corrected to \$400  
 2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
 2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
 2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
 2700 update after Verify release 10  
 2850 UPDATE after Verify release 10  
 2300 CO2 corrections  
 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 1700 corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th, CO2 rounding co  
 2050 early label, update after Verify release 10, CO2 corrections  
 2050 update after Verify release 10 issued, CO2 comb correction  
 2600 CO2 corrections, CO2 rounding corrections Aug 20th  
 2100 CO2 corrections  
 2300 early label, upate after Verify release 10  
 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 2100 corrected unadjusted unrounded CO2 highway and conbined values and combined adjusted w  
 2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
 1900 FE and GHG ratings corrected to 7  
 1700 corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th, CO2 rounding co  
 2200 CO2 corrections  
 2050 early label, update after Verify release 10, CO2 corrections  
 2050 update after Verify release 10 issued,CO2 corrections  
 1250 GHG rating corrected to 10  
 1750 CO2 corrections; inhouse dervied 5-cycle formula corrected Aug 15th  
 1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th, CO2 rounding corrections A  
 2050 early label, update after Verify release 10, CO2 corrections  
 2050 update after Verify release 10 issued, CO2 corrections  
 1700  
 1650  
 2150 CO2 corrections  
 2050 CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
 2500 CO2 correction  
 2500 corrected CO2 values, CO2 rounding corrections Aug 20th, rounding Aug 23rd  
 2700 CO2 corrections, CO2 rounding corrections Aug 20th  
 2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections, CO2 rounding c  
 2500 CO2 corrections  
 3000 CO2 correction Aug 15th, CO2 rounding corrections Aug 20th  
 2700 CO2 corrections



HWY2 City Fuel2 Unit Fuel2 Use2 Fuel2 Unit Fuel2 Use2 Fuel2 Unit Fuel2 Unit  
 HWY2 City Fuel2 Unit Fuel2 Use2 Fuel2 Unit Fuel2 Use2 Fuel2 Unit Fuel2 Unit

ction Aug 20th  
 O2

alue  
 ded CO2 value again, second time Aug 14th  
 gallons per 100 value...these values were switched

gallons per 100 value...these values were switched  
 gallons per 100 value...these values were switched

yes

/S set to yes

sumption to 6.2 per ASTM rounding procedure  
 ity and highway CO2 values

d weighted values not CO2 to tenths value that is imputted into Verify.

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85) PG	miles per gallon
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85) PG	miles per gallon
17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85) PG	miles per gallon
17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85) PG	miles per gallon

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

roup, CO2 rounding Aug 23rd  
nrounded highway and combined CO2 values  
o 29 MPG

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

ed MPG value  
nd corresponding 5-cycle values  
cted calculated values

ction Aug 20th  
rrections Aug 20th

ction Aug 20th  
hole CO2 value

rrections Aug 20th

ug 20th

orrections Aug 20th, CO2 rounding Aug 23rd

Relative Fuel	CO2	CO2	CO2	CO2	Fuel	EPA	Description	Intake Val	Exhaust Val	Carline CI	Carline CI
								2	27	Small Station Wag	
							SIDI;	2	27	Small Station Wag	
							SIDI;	2	27	Small Stati	
							SIDI;	2	27	Small Stati	
							SIDI;	2	24	Compact C	
							SIDI;	2	24	Compact C	
							SIDI;	2	24	Compact Cars	
							SIDI;	2	23	Subcompact Cars	
							SIDI;	2	23	Subcompa	
							SIDI;	2	23	Subcompact Cars	
							SIDI;	2	23	Subcompact Cars	
							SIDI;	2	25	Midsize Cars	
							SIDI;	2	25	Midsize Cars	
							SIDI;	2	25	Midsize Cars	
							SIDI;	2	25	Midsize Ca	
							SIDI; Unde	2	25	Midsize Ca	
							SIDI;	2	25	Midsize Cars	
							SIDI; Unde	2	26	Large Cars	
							SIDI;	2	26	Large Cars	
							SIDI;	2	26	Large Cars	
							SIDI;	2	27	Small Station Wag	
							SIDI;	2	231	Small SUV 4WD	
							SIDI;	2	231	Small SUV 4WD	
								2	233	Standard SUV 4W	
							SIDI;	2	233	Standard SUV 4W	
							SIDI;	2	23	Subcompact Cars	
							SIDI;	2	23	Subcompact Cars	
							SIDI;	2	24	Compact Cars	
							SIDI;	2	24	Compact Cars	
							SIDI;	2	23	Subcompact Cars	
							SIDI;	2	23	Subcompact Cars	
							SIDI;	2	23	Subcompact Cars	
							SIDI;	2	25	Midsize Cars	
							SIDI;	2	25	Midsize Cars	
							SIDI;	2	25	Midsize Cars	
							SIDI;	2	23	Subcompact Cars	
							SIDI;	2	21	Two Seaters	
4650	794	469	648	4650			SIDI;	2	23	Subcompact Cars	
							FFV;	2	25	Midsize Cars	
							SIDI;	2	24	Compact Cars	
4650	794	469	648	4650			FFV;	2	24	Compact Cars	
							SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650			FFV;	2	23	Subcompact Cars	
4650	794	469	648	4650			FFV;	2	23	Subcompact Cars	
								1	15	Midsize Cars	
								2	21	Two Seaters	
								2	21	Two Seaters	
								2	21	Two Seaters	
							SIDI;	2	21	Two Seaters	
							SIDI;	2	21	Two Seate	

SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	1	14	Compact Cars
	1	14	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
SIDI;	2	25	Midsize Cars
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Derived 5-cycle label 6/22/2012	12265		N	N	
cars	Vehicle Specific 5-cycle 6/11/2012	11328		N	N	
cars	Vehicle Specific 5-cycle 6/11/2012	11302		N	N	
cars	Vehicle Specific 5-cycle 6/11/2012	11487		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12092		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10360		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	9974		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12093		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10362		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10363		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	9976		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	11491		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	10364		N	N	
car	Derived 5-cycle label 6/25/2012	10288		N	N	
car	Vehicle Specific 5-cycle 6/22/2012	12228		N	N	
car	Vehicle Specific 5-cycle 6/22/2012	12229		N	N	
car	Vehicle Specific 5-cycle 6/15/2012	12227		N	N	
car	Vehicle Specific 5-cycle 6/22/2012	12230		N	N	
car	Vehicle Specific 5-cycle 6/15/2012	12226		N	N	
car	Vehicle Specific 5-cycle 8/16/2012	10646		N	N	
cars	Derived 5-cycle label 4/26/2012	11490		N	N	
	Vehicle Specific 5-cycle 7/11/2012	11319		N	N	
	Vehicle Specific 5-cycle 6/28/2012	12158		N	N	
D	Vehicle Specific 5-cycle 7/16/2012	12105		N	N	
D	Derived 5-cycle label 6/11/2012	12437		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	11510		N	N	
car	Vehicle Specific 5-cycle 7/13/2012	10452		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12106		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	11284		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12108		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	11285		N	N	
car	Vehicle Specific 5-cycle 5/21/2012	12111		N	N	
car	Vehicle Specific 5-cycle 7/30/2012	11513		N	N	
car	Vehicle Specific 5-cycle 7/30/2012	11512		N	N	
car	Vehicle Specific 5-cycle 6/27/2012	12122		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	12115		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	12113		N	N	
car	Vehicle Specific 5-cycle 6/18/2012	10200		N	N	
car	Vehicle Specific 5-cycle 3/30/2012	12116		N	N	
car	Vehicle Specific 5-cycle 4/19/2012	10208		N	N	
car	Vehicle Specific 5-cycle 3/30/2012	12119		N	N	
car	Vehicle Specific 5-cycle 4/19/2012	10207		N	N	
car	Vehicle Specific 5-cycle 3/30/2012	12117		N	N	
car	Vehicle Specific 5-cycle 3/30/2012	12440		N	N	
car	Vehicle Specific 5-cycle 3/20/2012	12211		N	N	
car	Vehicle Specific 5-cycle 7/12/2012	11087		N	N	
car	Vehicle Specific 5-cycle 8/17/2012	12441		N	N	
car	Vehicle Specific 5-cycle 1/14/2013	12234		N	N	
car	Vehicle Specific 5-cycle 6/11/2012	12128		N	N	
car	Vehicle Specific 5-cycle 6/20/2012	12442		N	N	

car	Vehicle Specific 5-cycle	6/22/2012	12130		N	N
car	Vehicle Specific 5-cycle	6/22/2012	12443		N	N
car	Derived 5-cycle label	7/19/2012	12135		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187		N	N
car	Derived 5-cycle label	6/25/2012	12272		N	N
car	Vehicle Specific 5-cycle	7/12/2012	12271		N	N
car	Vehicle Specific 5-cycle	7/30/2012	12435		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373		N	N
car	Derived 5-cycle label	7/30/2012	10277		N	N
car	Derived 5-cycle label	6/25/2012	12273		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10186		N	N
car	Vehicle Specific 5-cycle	7/25/2012	11044		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10532		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10534		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527		N	N
car	Derived 5-cycle label	6/22/2012	12264		N	N
car	Derived 5-cycle label	6/25/2012	12268		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12277		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11531		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531		N	N
car	Derived 5-cycle label	6/22/2012	12263		N	N
car	Vehicle Specific 5-cycle	6/18/2012	11372		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300		N	N
car	Derived 5-cycle label	6/25/2012	12267		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11532		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535		N	N
car	Vehicle Specific 5-cycle	7/19/2012	12434		N	N
cars	Derived 5-cycle label	6/25/2012	12151		N	N
cars	Derived 5-cycle label	6/25/2012	12266		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11534		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11536		N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11539		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11547		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554		N	N
	Derived 5-cycle label	6/18/2012	12432		N	N
	Vehicle Specific 5-cycle	6/11/2012	12276		N	N
	Derived 5-cycle label	6/11/2012	12431		N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563		N	N
D	Derived 5-cycle label	6/25/2012	12278		N	N
D	Derived 5-cycle label	6/25/2012	11559		N	N

2017-FFP 004746

N	N	ENGINE CODE CEH (GALLARDO COUPE AND SEDAN)	N	INLET CONTINUOUSLY VARIABLE / MECHANICAL
N	N	ENGINE CODE	Y	INLET AN IN
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	MECHANICAL HYDRAULIC VVT SYSTEM (s) INTAKE A
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	SCR Equipped	N	N
N	N	SCR Equipped	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	Electronic Control / Hydraulic adjustment
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	Y	INTAKE / EXHAUST CAM TIMING ADJUSTED HYDRAULIC
N	N	V6 CYLINDER 2 BANK SYSTEM	Y	MECHANICAL HYDRAULIC VVT SYSTEM (s) INTAKE C



Device Des	# Batteries	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit
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These observations have been made (All valves are designed to be fully injected and do not require any adjustment) and the valves are folded and hydraulically adjusted.

1 Lithium Ion	266	5	37 On-Board
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These observations have been made (All valves are designed to be fully injected and do not require any adjustment) and the valves are folded and hydraulically adjusted.

STMENT

MECHANICAL-HYDRAULIC

These observations have been made (All valves are designed to be fully injected and do not require any adjustment) and the valves are folded and hydraulically adjusted.

MECHANICAL-HYDRAULIC

These observations have been made (All valves are designed to be fully injected and do not require any adjustment) and the valves are folded and hydraulically adjusted.

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

adjust valves on a single camshaft. No change in valve overlaps.

MECHANICAL-HYDRAULIC

CONTINUOUSLY VVT

CONTINUOUSLY VVT

MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

ECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC

YDRAULIC  
controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC

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YDRAULIC  
YDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC

YDRAULIC  
ND OUTLET CAMS 1 Lithium Ion 220 5 27 On-Board

YDRAULIC  
YDRAULIC

YDRAULIC  
YDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

LICALLY AND CONTROLLED ELECTRONICALLY  
AMS 1 NiMH 288 6 21.5 On-Board

(2) third gear at this point, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

(2) third gear at this point, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical Regen Brake Both Y 1AC Induction

(2) third gear at this point, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

(2) third gear at this point, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

(2) third gear at this point, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

(2) third gear at this point, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

(2) third gear at this point, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical BRAKE PEDAL TRIGGERED REGENERATIVE

1Other

Other BRAKE PEDAL TRIGGERED REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM 1Other

Motor	Ger	Rated Mot	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell V	Off Board	Camless V	Oil Viscosi
			CRDI	Common Rail	Direct Diesel Injection	Non				5W40
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignit	N	N				5W40
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignit		N				5W40 VW
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignit		N				5W40 VW
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
		40	GDI	Spark Ignit	Non Direct Injection	N				5W40 VW 50200
			CRDI	Common Rail	Direct Diesel Injection	Non				5W30 VW 50700
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignit	Non Direct Injection	N				5W40
			GDI	Spark Ignit	Non Direct Injection	N				5W40
			GDI	Spark Ignit	Non Direct Injection	N				5W40 VW 50200
			MFI	Multipoint	Sequential fuel inject	Non				5W30 VW 504 00
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			MFI	Multipoint	Sequential fuel inject	Non				5W30 VW 504 00
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			MFI	Multipoint	Sequential fuel inject	Non				5W30 VW 504 00
			MFI	Multipoint	Sequential fuel inject	Non				5W30 VW 504 00
			MFI	Multipoint/sequential	fuel inject	Non				0W40 / VW50200
			MFI	Multipoint/sequential	fuel inject	Non				10W60 VW 50101
			MFI	Multipoint/sequential	fuel inject	Non				5W30 VW 50400 /
			MFI	Multipoint/sequential	fuel inject	Non				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				10W60 VW 50101
			GDI	Spark Ignit		N				10W60 VW

	GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
	GDI	Spark Ignit	N	10W60 VW
	CRDI	Common Rail Direct Diesel Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
	GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
	GDI	Spark Ignition Direct Injection	N	5W40 / VW50200
	CRDI	Common Rail Direct Diesel Injection	N	5W40
	CRDI	Common Rail Direct Diesel Injection	N	5W40
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40
	CRDI	Common Rail Direct Diesel Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
3 PHASE PERMANENT MAGNET	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	N	5W40
	CRDI	Common Rail Direct Diesel Injection	N	5W40
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	CRDI	Common Rail Direct Diesel Injection	N	5W40 VW 50501
	CRDI	Common Rail Direct Diesel Injection	N	5W40 VW 50501
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	N	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	N	5W30 VW 50700
3 PHASE CURRENT PERM. MAGNET	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200

Stop/StartStop/StartTrans in FETrans as IModel TypCharge De Charge De Charge SuCharge SuEPA Calcul

N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6) A3 frt man
N	No	Auto(AM-S6)	Auto(AM-S6) A3 quattro
N	No	Auto(AV-S6)	Auto(AV-S6)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8) Audi A6 CVT
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi A6 quattro
Y	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi Q7
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Manual(M6)	Manual(M6) TRS
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(AM-S7)	Auto(AM-S7)
Y0700	Yes	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S6)	Auto(AM-S6)
Y0700	No	Manual(M6)	Manual(M6) Gallardo C

N 50500	No	Auto(AM-S6)	Auto(AM-S6)
N 50500	No	Manual(M6)	Manual(M6) Gallardo S
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M5)	Manual(M5)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6) C M6
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6) Jetta SportWagen M6
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M5)	Manual(M5)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(S6)	Auto(S6) Jetta Base
N	No	Manual(M5)	Manual(M5)
N	No	Manual(M6)	Manual(M6) Jetta SportWagen M6
N	No	Manual(M6)	Manual(M6)
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M5)	Manual(M5)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6) Jetta SportWagen M6
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M5)	Manual(M5)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(S6)	Auto(S6)
N	No	Manual(M5)	Manual(M5)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(S6)	Auto(S6) Tiguan front
N	No	Manual(M6)	Manual(M6)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Touareg Hybrid



Model	Year	EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA SmSmartWay
	46.2		9	8DVWXV02.0U5N	5	
	30.8		6	6DADXV02.03PA	7	
	30.4		6	6DADXV02.0	7	
	30.9		6	6DADXV02.0	5	
	35.2		7	7DADXV02.0	5	
	30.8		6	6DADXV02.0	5	
	33.2		7	7DADXV02.03UB	5	
	35.2		7	7DADXV02.03UB	5	
	30.8		6	6DADXV02.0	5	
	30.8		6	6DADXV02.03UB	5	
	33.2		7	7DADXV02.03UB	5	
	36.9		7	7DADXV02.03UB	5	
	30.8		6	6DADXV02.03UB	5	
	28.1		5	5DADXJ03.03UF	5	
	27.5		5	5DADXJ03.0	5	
	27.5		5	5DADXJ03.0	5	
	27.1		5	5DADXV04.03UJ	5	
	27.5		5	5DADXJ03.0	5	
	24.4		4	4DADXV04.03UJ	5	
	19.3		3	3DVWXV06.3UA8	5	
	29.5		6	6DADXV02.03UB	5	
	28.8		6	6DADXT02.04UB	5	
	34		7	7DADXT02.0HUB	5	
	28.1		5	4DADXT03.03UG	5	
	22.9		4	4DADXT03.0TLF	5	
	23		4	4DADXV04.23UL	5	
	22.6		4	4DADXV04.23UL	5	
	26.9		5	5DADXJ03.03UF	5	
	23.5		5	5DADXJ03.03UF	5	
	26.9		5	5DADXJ03.03UF	5	
	23.5		5	5DADXJ03.03UF	5	
	26.4		5	5DADXJ03.03UF	5	
	25.5		5	5DADXV04.03UJ	5	
	25.5		5	5DADXV04.03UJ	5	
	23.6		4	4DADXV04.03UJ	5	
	33.3		7	7DADXV02.03UA	5	
	33.3		7	7DADXV02.03UA	5	
	25.6		5	5DADXV02.53UK	5	
	17.2		2	2DBEXV06.0501	5	
	23.6		4	4DADXV04.03UJ	5	
	17.4		2	2DBEXV06.0501	5	
	21.8		4	4DADXV04.03UJ	5	
	17.2		2	2DBEXV06.0501	5	
	17.4		2	2DBEXV06.0501	5	
	15.9		2	2DBEXV06.84LA	5	
	12.6		1	1DBGTV08.0V16	5	
	16.4		2	2DNLXV06.5L83	5	
	14.5		1	1DNLXV06.5L83	5	
	19.4		3	3DADXV05.2LR8	5	
	17.4		3	3DADXV05.	5	

19.3		3	3 DAD XV05.2LR8	5
16.1		2	2 DAD XV05.	5
43.7		8	7 DVW XV02.0U5N	5
31.8		6	6 DVW XV02.03PA	7
43.4		8	7 DVW XV02.0U5N	5
30.7		6	6 DVW XV02.03PA	7
31.6		6	6 DVW XV02.5A59	7
31.9		6	6 DVW XV02.5M59	7
31.5		6	6 DVW XV02.03PA	7
43.4		8	7 DVW XV02.0U5N	5
30.7		6	6 DVW XV02.03PA	7
30.3		6	6 DVW XV02.5A59	7
32.3		6	6 DVW XV02.03PA	7
31.8		6	6 DVW XV02.03PA	7
25.8		5	5 DVW XV03.6U46	5
24.8		5	5 DVW XV03.6U46	5
32.4		6	6 DVW XV02.03SA	5
46.2		9	8 DVW XV02.0U5N	5
46		9	8 DVW XV02.0U5N	5
33.1		7	7 DVW XV02.5A59	7
32.2		7	7 DVW XV02.5M59	7
28.5		5	5 DAD XV02.03UA	5
34.8		7	7 DAD XV02.03PA	7
31.2		6	6 DAD XV02.03PA	7
46.2		9	8 DVW XV02.0U5N	5
35		7	7 DVW XV02.03PA	7
32.9		6	6 DVW XV02.0U36	5
34.7		7	7 DVW XV02.0U36	5
46		9	8 DVW XV02.0U5N	5
32.6		7	7 DVW XV02.03PA	7
33.1		7	7 DVW XV02.5A59	7
32.2		7	7 DVW XV02.5M59	7
60.9		10	10 DVW XV01.4PHE	7
44.2		8	7 DVW XV02.0U5N	5
46		9	8 DVW XV02.0U5N	5
33.1		7	7 DVW XV02.5A59	7
32.2		7	7 DVW XV02.5M59	7
44.6		9	8 DVW XV02.0U4S	5
46.4		9	8 DVW XV02.0U4S	5
31.9		6	6 DVW XV02.5A59	7
31.7		7	7 DVW XV02.5M59	7
28.5		6	6 DVW XV03.6U41	5
29.9		6	6 DVW XJ02.03UA	5
26.4		5	5 DVW XJ02.03UA	5
29.6		6	6 DVW XJ02.03UA	5
23.3		6	5 DAD XT03.02UG	5
25		4	4 DVW XT03.6U76	5
28.2		5	5 DVW XT03.0HEV	5

Signal 10 Pull #507 (for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DAD XV02.03UA 5

DAD XV02.03UA 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

Highway Miles Per Gallon (City/Highway/Combined)	Highway Miles Per Gallon (City/Highway/Combined)	Highway Miles Per Gallon (City/Highway/Combined)	Highway Miles Per Gallon (City/Highway/Combined)	Highway Miles Per Gallon (City/Highway/Combined)
3100	340	245	297	
400	432	319	381	
400	442	296	376	
400	442	316	385	
600	373	304	342	
400	437	297	374	
600	397	276	343	
600	373	304	342	
400	437	297	374	
400	437	297	374	
600	397	276	343	
1350	360	272	320	
400	437	297	374	
1400	482	326	412	
1900	498	321	418	
1900	498	321	418	
1900	515	313	424	
1900	498	321	418	
3400	554	345	460	
6150	675	430	565	
900	444	333	394	
900	450	314	389	
600	369	298	337	
1400	541	369	464	
4150	573	411	500	
4150	562	379	480	
4150	558	398	486	
1900	488	321	413	
2650	441	355	402	
1900	488	321	413	
2650	441	355	402	
1900	500	341	429	
2650	530	330	440	
2650	530	330	440	
3400	580	347	475	
600	394	284	345	
600	394	284	345	
2650	499	350	432	
8650	787	474	646	
4150	590	364	488	
8650	768	469	633	
5150	638	370	517	
8650	787	474	646	
8650	768	469	633	
10400	840	501	688	
16900	1050	599	847	
10400	836	481	676	
12150	902	547	742	
6150	657	447	562	
7400	734	511	634	

	6150	660	446	564
	8650	768	452	626
2600		354	262	313
100		401	291	351
2600		365	250	313
	400	430	298	371
850		396	310	358
850		408	289	354
	400	421	310	371
2600		365	250	313
	400	430	298	371
100		418	329	378
100		403	283	349
100		425	279	360
	1900	507	334	429
	2650	523	351	446
100		405	257	338
3100		340	245	297
3100		342	243	297
1350		374	286	334
1350		388	271	335
	1400	460	330	401
1100		379	271	331
100		416	287	358
3100		340	245	297
1100		372	280	331
850		381	299	344
2100		361	262	316
3100		342	243	297
600		403	272	344
1350		374	286	334
1350		388	271	335
5350		211	182	198
2850		352	258	310
3100		342	243	297
1350		374	286	334
1350		388	271	335
3100		331	240	290
3350		330	239	289
850		401	289	351
1350		391	275	339
	900	449	319	390
	900	430	341	390
	1900	484	336	417
	900	435	343	394
	900	517	351	442
	3400	520	391	462
	1900	447	372	413

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556	348	462.4	660	446	563.7
681	391	551	768	452	625.8
272	184	232.4	354.3	261.8	312.7
334.3	211.2	278.9	401	290.6	351.3
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
323.7	227.6	280.5	396.3	310.3	357.6
335.2	207.2	277.6	407.6	288.8	354.1
332	220.9	282	421	310	371
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
335.4	235.6	290.5	418.2	329.4	378.2
327.2	207.7	273.4	402.8	282.7	348.8
346.3	202.5	281.6	425.2	279.3	359.5
419	253	344.3	506.7	333.8	428.9
434	265	358	523	351.1	445.6
321	213	272.4	404.7	256.6	338.1
259.8	171.2	219.9	339.8	244.6	297
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
372	240	312.6	459.5	330.5	401.4
295.1	203.2	253.7	379.2	271.3	330.6
340.4	215.5	284.2	415.9	287	357.9
259.8	171.2	219.9	339.8	244.6	297
300.9	196.7	254	372	280.4	330.8
315	214	269.6	381.3	298.8	344.2
307	192	255.2	360.5	262	316.2
261.7	170	220.4	342.1	242.9	297.5
333.9	197.2	272.4	403.3	271.8	344.1
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
155	134	145.6	211	182	198
270	181	230	351.9	257.7	309.5
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
268	179	228	331	240	290
266	162	219.2	330	239	289
328.2	217.8	278.5	400.9	289.4	350.7
339.6	206.8	279.8	391.3	275	339
372	238	311.7	449	319	390.5
339.6	244.4	296.8	429.9	341.3	390
407	248	335.4	484	336	417.4
343.6	246	299.7	434.6	343.5	393.6
422	248	343.7	517	351	442.3
416	281	355.2	520.1	390.6	461.8
354	267	314.8	446.9	371.8	413.1



City	State	Wounded to come to aid	Distance	Comb Vol Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT
		N	2.9			2.9		
		N	4.2			4.2		
		N	4.2			4.2		
		N	4.2			4.2		
		N	3.8			3.8		
		N	4.2			4.2		
		N	3.8			3.8		
		N	3.8			3.8		
		N	4.2			4.2		
		N	4.2			4.2		
		N	3.8			3.8		
		N	3.6			3.6		
		N	4.2			4.2		
		N	4.5			4.5		
		N	4.8			4.8		
		N	4.8			4.8		
		N	4.8			4.8		
		N	4.8			4.8		
		N	5.3			5.3		
		N	6.2			6.2		
		N	4.3			4.3		
		N	4.3			4.3		
		N	3.8			3.8		
		N	4.5			4.5		
		N	5.6			5.6		
		N	5.6			5.6		
		N	5.6			5.6		
		N	4.8			4.8		
		N	5			5		
		N	4.8			4.8		
		N	5			5		
		N	4.8			4.8		
		N	5			5		
		N	5			5		
		N	5.3			5.3		
		N	3.8			3.8		
		N	3.8			3.8		
		N	5			5		
		N	7.1			7.1		
		N	5.6			5.6		
		N	7.1			7.1		
		N	5.9			5.9		
		N	7.1			7.1		
		N	7.1			7.1		
		N	7.7			7.7		
		N	10			10		
		N	7.7			7.7		
		N	8.3			8.3		
		N	6.2			6.2		
		N	6.7			6.7		

N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	2.9	2.9
N	3.7	3.7
N	4	4
N	3.6	3.6
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	3.8	3.8
N	2.2	2.2
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8

2017-FFP\_004766



## EPA\_UNR EPA\_UNR EPA\_ADJ EPA\_PHEV Label Submitter

[illegible]

[illegible]



















**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 8/27/2012 12:54:14 PM  
**Subject:** RE: VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)

Thanks Jim.

I will be resubmitting the CSI and Cert Request without Q5 included this morning.

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Friday, August 24, 2012 11:00 AM  
To: Rodgers, William (EEO)  
Cc: Giles, Michael (EEO)  
Subject: RE: VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB

Bill, I talked to Mike about this but here's the story. Even though it is a Conditional Cert, I don't think I can include the Q5 on the certificate until you have at least submitted data on the Q5 since it will be the new EDV. The Conditional provision is only intended for vehicles pending a confirmatory test. I will deny the cert request and you can re-submit it without the Q5.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>  
Date: 08/23/2012 09:50 AM  
Subject: RE: VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB

Hi Jim,  
I should clarify that I have described Audi Q5 in this Application but have not yet submitted E85 test data

for the model. We anticipate data in the coming weeks, at which time you had mentioned possibly selecting it for EVAP confirmatory testing to coincide with the already selected A5 Cabrio EVAP confirmatory tests from this test group.

Considering that the certificate would be conditional with or without Q5 included, I propose the Certificate be issued as requested (with Q5) to allow vehicles to be Labeled and shipped immediately IF we receive a test waiver from you for the E85 exhaust tests.

Sorry for the confusion.  
Bill

From: Rodgers, William (EEO)  
Sent: Wednesday, August 22, 2012 3:44 PM  
To: 'Jim Snyder' (Snyder.Jim@epamail.epa.gov)  
Cc: Giles, Michael; Thomas, Richard (EEO); Kata, Leonard (EEO)  
Subject: VW Group - 2013 FFV Test Group Certification Request - DADXJ02.0FUB

Hello Jim,  
I have submitted the Initial Application and confirmatory test Decision Information for the following 2013 Audi flex-fuel Test Group/Evaporative Family. All tests have been submitted including manufacturer confirmatory tests. This test group was recently selected for EPA confirmatory EVAP testing.

As previously discussed, this flex-fuel test group uses carry across gasoline test data from the test group DAD XV02.03UB which has been verified to have identical engine and transmission programming for gasoline operation.

We are requesting a conditional certificate be issue as soon as possible due to a very tight port release deadline as early as August 31st.

Test Group: DADXJ02.0FUB  
Evap. Family: DADXR0140B8F

Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 8/27/2012 1:33:33 PM  
**Subject:** FW: EPA Has Denied The Certificate Request for TG: DADXJ02.0FUB Evap: DADXR0140B8F

Hi Jim,

I have resubmitted the below mentioned CSI and Cert Request, excluding the Audi Q5. We are under a tight deadline on this one so if there are any questions please let me know as soon as possible. I will revise the application later in the week when the Q5 is added back in with a running change.

Thanks,  
Bill

-----Original Message-----

From: no-reply@epa.gov [mailto:no-reply@epa.gov]  
Sent: Friday, August 24, 2012 11:07 AM  
To: Rodgers, William (EEO); Giles, Michael (EEO); Hart, Robert (VWoA)  
Subject: EPA Has Denied The Certificate Request for TG: DADXJ02.0FUB Evap: DADXR0140B8F

The following is a courtesy copy of status message for a Verify submission. Any references made to links refer to links which will appear in the CDX Inbox message.

The certificate request for Test Group DADXJ02.0FUB and Evaporative Family DADXR0140B8F has been denied. Contact your CSD compliance representative for additional information.

The Verify submission this message relates to has the following values:

Test Group Name: DADXJ02.0FUB

The following transaction identifier has been assigned to this request:

\_dc4ad1fd-55b8-4f72-a268-45e0914dc52c

Please do not reply to this message.

**To:** DavidA Wright/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 9/5/2012 12:36:44 PM  
**Subject:** RE: Request for US06 Drive Trace  
[Copy of US06 Trace.xlsx](#)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[image001.gif](#)

Hello David,

Please find attached the drive trace that the factory provided for this test.

Regards,

Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, August 23, 2012 9:09 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: RE: Request for US06 Drive Trace

Mike,

Thanks for your reply, I look forward to receiving the data once it has been provided by the factory. Please let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ

Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

"Giles, Michael (EEO)" ---08/23/2012 08:05:42 AM---David, I have forwarded your request to our factory and will reply with the information as soon as i

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/23/2012 08:05 AM  
Subject: RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, August 22, 2012 3:54 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace

Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

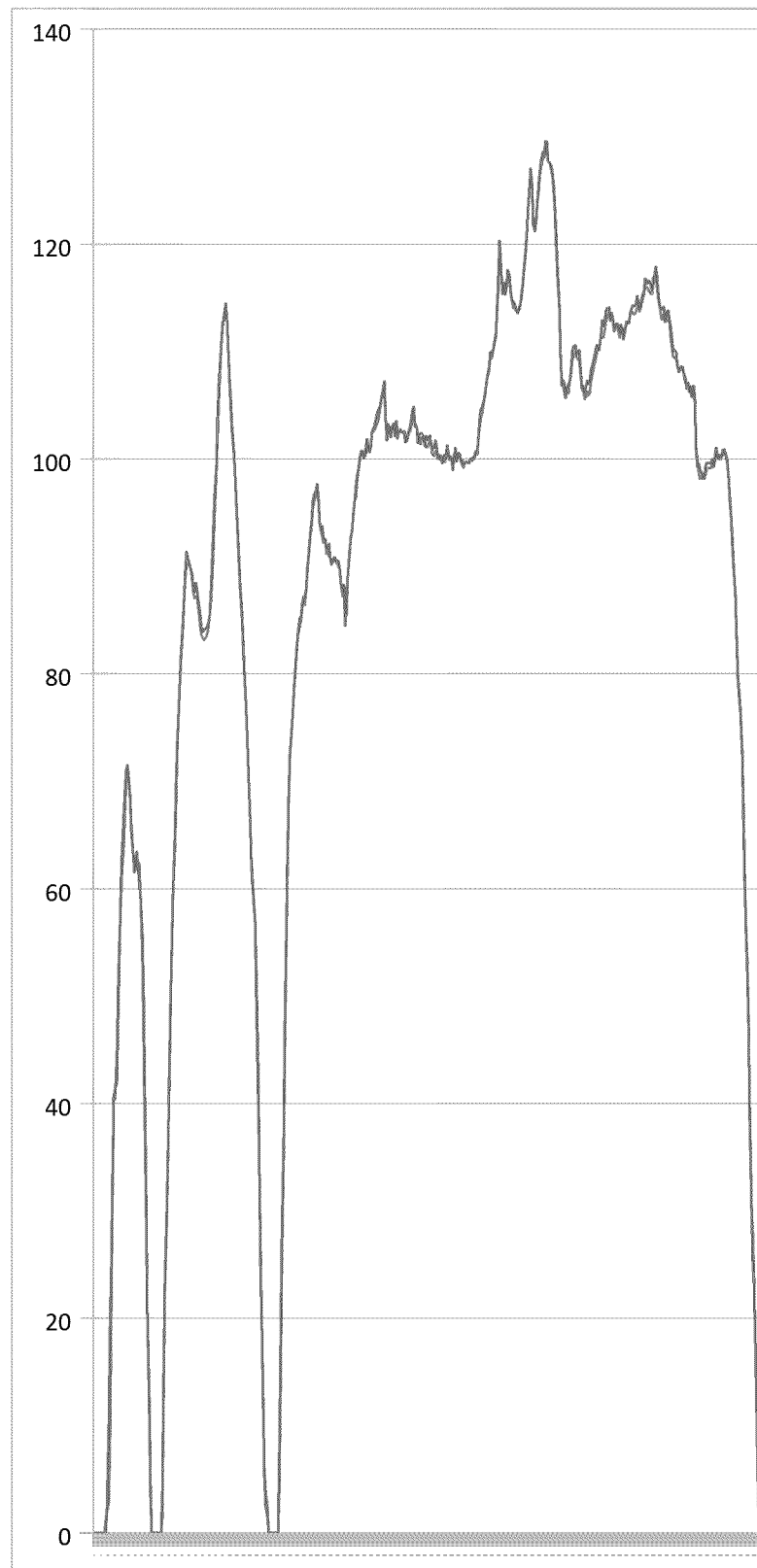
\*\*\*\*\*

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	Soll	Ist
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	1.17	0
9	1.95	2.31
10	2.83	10.11
11	8.84	19.22
12	20.51	24.78
13	31.4	33.45
14	40.15	40.59
15	40.39	41.28
16	44.84	41.99
17	50.94	47.89
18	55.04	53.79
19	58.22	59.17
20	61.2	63.06
21	63.83	66.95
22	67.2	69.16
23	69.99	71.02
24	70.92	71.49
25	69.89	70.39
26	68.57	68.91
27	65.35	66.13
28	63.3	63.31
29	61.93	61.53
30	61.73	62.57
31	62.76	63.44
32	62.47	62.02
33	62.37	60.69
34	59.34	59.12
35	53.24	55.83
36	45.81	49.99
37	37.51	40.61
38	29.4	31.55
39	20.42	20.6
40	11.14	12.75
41	3.42	4.53
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0

Start: 0 Ende: 1281



47	0	0
48	0	0
49	0	0
50	1.32	3.83
51	12.55	14.84
52	22.52	23.17
53	28.42	29.88
54	34.63	35.62
55	42.44	41.08
56	49.28	48.17
57	53.68	54.22
58	58.9	59.44
59	64.52	63.37
60	69.84	67.87
61	73.7	72.93
62	76	76.22
63	78.93	79.02
64	81.71	81.34
65	84.59	84.15
66	86.94	86.75
67	88.94	89.6
68	90.26	91.37
69	90.11	90.72
70	90.21	90.4
71	89.72	89.64
72	88.64	89.36
73	87.52	87.84
74	87.03	87.58
75	87.23	88.48
76	86.98	87.69
77	86.06	86.75
78	84.35	85.53
79	83.61	83.96
80	83.37	83.88
81	83.17	84.16
82	83.32	84.14
83	83.47	84.27
84	84.2	84.69
85	85.42	85.38
86	87.72	86.69
87	90.65	88.75
88	93.82	91.48
89	96.75	94.96
90	99.44	98.91
91	102.37	103.85
92	105.64	107
93	108.33	108.96
94	110.92	110.79

95	112.67	112.39
96	113.11	113.66
97	113.31	114.49
98	112.77	112.95
99	109.94	110.11
100	107.06	107.49
101	104.52	105.55
102	102.52	103.05
103	100.61	100.89
104	98.36	98.39
105	95.58	95.89
106	93.04	93.47
107	90.4	90.99
108	87.91	88.45
109	85.27	85.85
110	82.69	83.15
111	79.9	80.27
112	77.51	77.62
113	74.77	74.78
114	71.36	71.44
115	66.86	66.72
116	62.95	62.78
117	60.9	60.44
118	59.15	58.56
119	57.09	56.97
120	49.91	52.42
121	40.93	43.83
122	33.31	33.56
123	26.28	24.86
124	18.9	19.17
125	11.62	12.68
126	6.2	5.22
127	3.96	2.59
128	2.49	1.52
129	0	0
130	0	0
131	0	0
132	0	0
133	0	0
134	0	0
135	0	0
136	0	0
137	3.71	7.49
138	13.09	17.48
139	24.03	27.4
140	34.68	36.81
141	45.18	47.71
142	53.58	55.13

143	61.05	62.25
144	67.89	68.55
145	72.14	72.49
146	74.73	74.92
147	76.78	76.73
148	79.07	78.7
149	80.54	80.31
150	82.39	82.03
151	83.66	83.8
152	84.35	85.15
153	84.98	85.3
154	86.2	86.54
155	86.4	87.17
156	86.4	87.2
157	87.52	87.78
158	89.91	89.46
159	91.23	91.84
160	92.89	93.22
161	93.68	94.25
162	95.34	96.13
163	96.07	96.67
164	96.56	97.05
165	96.95	97.66
166	96.07	96.26
167	93.97	94.03
168	93.28	93.44
169	92.84	93.73
170	92.16	92.71
171	92.21	92.55
172	91.14	91.54
173	91.38	91.66
174	90.99	92.14
175	90.74	90.74
176	90.31	90.12
177	90.45	90.75
178	90.84	90.84
179	90.6	90.55
180	90.21	90.51
181	90.01	90.5
182	89.77	89.86
183	88.35	88.41
184	87.23	87.65
185	87.57	88.3
186	84.49	85.32
187	87.08	85.44
188	89.13	89.04
189	91.09	91.51
190	92.8	92.62



191	93.24	93.42
192	94.95	94.75
193	96.07	96.06
194	97.53	96.41
195	98.51	97.93
196	99.24	99.4
197	100.17	100.23
198	100.32	100.76
199	100.51	100.73
200	100.07	100.13
201	100.27	100.6
202	101	101.84
203	100.66	101.22
204	100.61	100.74
205	101	101.29
206	102.52	102.52
207	102.52	102.82
208	102.71	103.08
209	103.1	103.9
210	103.39	104.41
211	103.88	104.62
212	104.62	104.93
213	105.64	105.58
214	105.84	106.52
215	106.32	107.21
216	103.44	103.69
217	102.12	101.73
218	102.42	103.26
219	102.76	102.98
220	102.27	102.02
221	103	103.03
222	103.05	103.31
223	102.56	102.14
224	102.86	103.5
225	101.93	102.48
226	102.52	102.42
227	102.52	102.77
228	102.61	102.56
229	102.42	102.5
230	102.61	102.3
231	101.68	101.56
232	101.68	101.88
233	102.37	102.6
234	102.56	102.92
235	103.1	103.63
236	103.83	104.51
237	104.27	104.86
238	103	103.33

239	102.91	103
240	101.49	101.49
241	101.98	102.26
242	101.39	102.35
243	102.03	102.45
244	101.93	102.19
245	101.25	101.29
246	101.15	102.15
247	101.1	101.73
248	101.39	101.96
249	101.64	102.19
250	101.49	101.35
251	100.51	101.06
252	100.27	101.01
253	100.76	101.73
254	100.71	101.18
255	100.02	100.03
256	100.07	100.28
257	99.93	100.32
258	99.93	99.59
259	100.07	100.21
260	99.73	100.36
261	100.12	100.49
262	100.56	101.27
263	100.07	100.39
264	99.88	100.24
265	100.02	99.92
266	99.49	98.93
267	100.37	100.13
268	100.61	101.03
269	100.07	99.77
270	100.51	100.6
271	100.22	100.49
272	99.78	99.76
273	99.44	99.93
274	99.19	99.48
275	99.58	99.54
276	99.68	99.78
277	99.68	99.63
278	99.58	99.62
279	99.98	99.92
280	99.93	100.06
281	99.83	100.04
282	100.07	100.15
283	100.46	100.78
284	100.42	100.54
285	101.78	102.02
286	102.95	103.74

287	103.79	104.64
288	104.27	104.84
289	105.4	105.49
290	106.03	106.24
291	107.2	107.06
292	107.69	107.94
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296	110.13	110.27
297	110.77	110.99
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299	114.29	113.74
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322	123.37	123.43
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326	122.54	121.76
327	121.37	121.2
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332	127.33	127.85
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335	128.6	129.59
336	128.74	129.56
337	127.77	127.71
338	127.42	127.57
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341	124.79	125.56
342	123.08	123.49
343	119.8	121.04
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345	114.14	114.41
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347	106.86	106.81
348	106.81	107.36
349	106.23	106.98
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352	106.13	106.94
353	107.35	107.26
354	107.94	108.51
355	109.21	110.09
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357	109.99	110.62
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473	94.6	94.71
474	91.97	92.79
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476	87.42	87.23
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479	78.49	77.88
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481	73.02	72.56
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483	61.39	60.73
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487	38.44	39.7
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524	42.2	42.98
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527	21.49	22.97
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579	78.34	73.13
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585	72.82	74.55
586	67.4	69.48
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707	50.45	47.68
708	54.75	51.16
709	57.97	54.99
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711	63.54	63.69
712	66.96	67.36
713	69.79	68.94
714	70.87	71.26
715	70.04	70.72
716	68.72	68.7
717	65.69	66
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719	62.08	62.87
720	61.78	63.04
721	62.71	63.76
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743	28.13	30.04
744	34.29	36.61
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747	53.43	55.65
748	58.51	60.05
749	64.08	64.28
750	69.4	69.04
751	73.5	73.55
752	75.95	76.8
753	78.78	79.13
754	81.47	81.27
755	84.35	83.13
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758	90.21	90.79
759	90.16	90.03
760	90.21	90.66
761	89.77	90.6
762	88.79	89.42
763	87.62	88.21
764	87.08	87.61
765	87.23	87.83
766	87.13	87.55

767	86.15	86.33
768	84.49	85.14
769	83.61	84.32
770	83.37	83.88
771	83.17	83.57
772	83.27	83.43
773	83.52	83.58
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775	85.32	85.51
776	87.47	87.1
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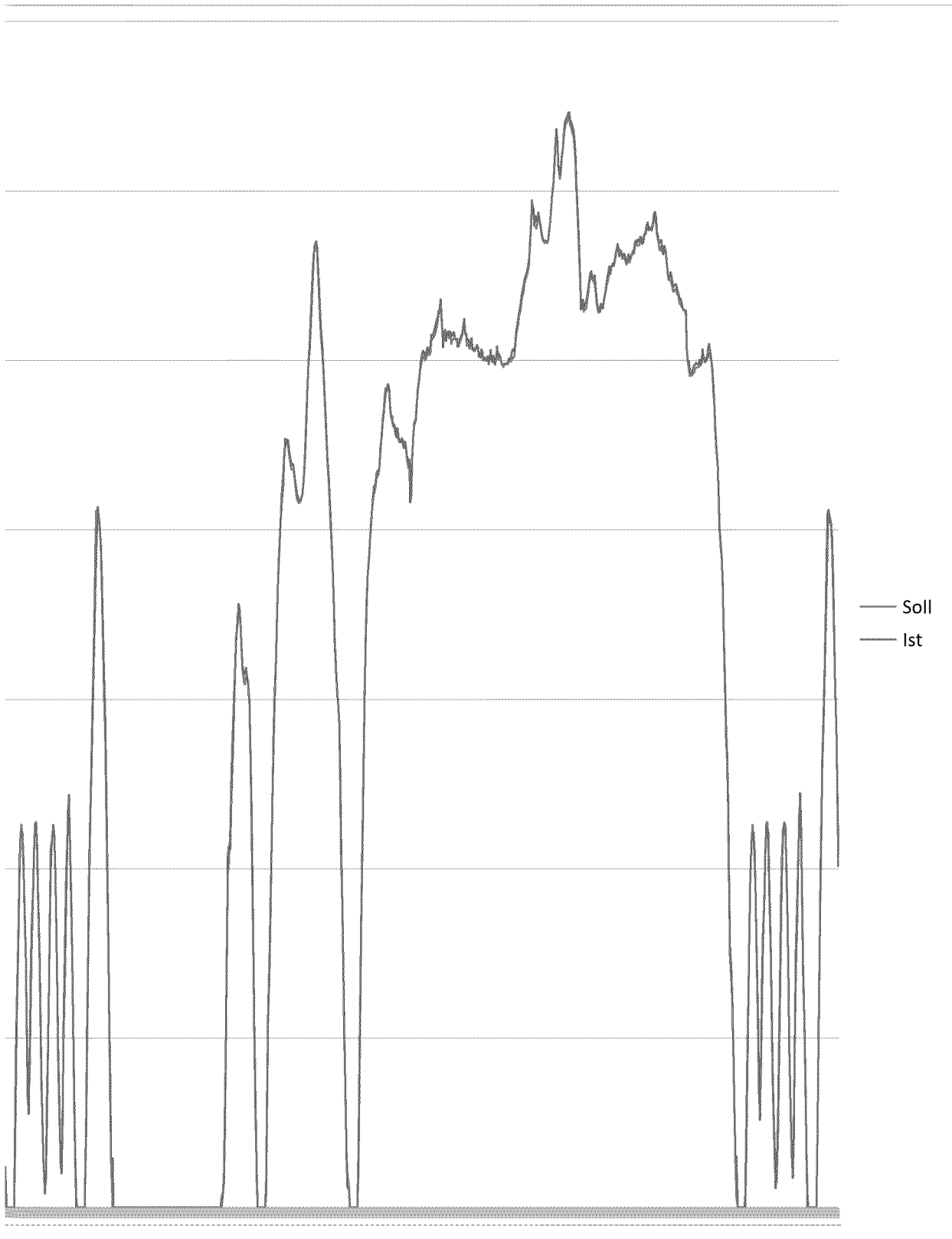
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1059	107.11	107.24
1060	107.99	108.19
1061	108.67	109.1
1062	109.21	109.88
1063	109.65	110.45
1064	110.33	111.1
1065	110.18	110.27
1066	110.96	110.99
1067	111.31	111.44
1068	111.31	111.12
1069	111.94	111.7
1070	112.72	112.44
1071	113.11	113.19
1072	113.5	113.79
1073	113.02	112.3
1074	113.06	112.61
1075	112.87	112.91
1076	112.04	112.26
1077	111.99	112.36
1078	112.33	112.63
1079	111.89	112.26
1080	111.26	111.48
1081	111.84	111.95
1082	111.84	112.56
1083	111.5	111.92
1084	111.94	112.19
1085	112.48	112.58
1086	112.63	112.92
1087	112.58	113.02
1088	113.46	113.86
1089	113.6	114.2
1090	113.65	113.85
1091	113.5	114.33
1092	113.6	114.01
1093	114.04	114.58
1094	114.29	114.6
1095	113.75	113.79
1096	114.04	113.87
1097	114.82	114.6
1098	115.26	114.93
1099	116.04	115.65
1100	116.04	116.31
1101	115.9	115.36
1102	115.7	115.45

1103	115.46	115.68
1104	115.31	115.39
1105	116.04	116.31
1106	116.63	117.28
1107	117.22	117.55
1108	116.09	117.02
1109	114.87	115.24
1110	113.94	114.38
1111	113.11	113.88
1112	112.97	114.08
1113	113.5	114.24
1114	112.92	112.86
1115	113.5	112.48
1116	112.97	113.53
1117	112.67	112.85
1118	111.4	111.58
1119	110.48	110.25
1120	109.6	109.51
1121	109.45	109.8
1122	109.45	110.39
1123	108.77	109.43
1124	108.08	108.66
1125	108.13	108.75
1126	108.42	109
1127	108.38	109.06
1128	107.94	108.47
1129	107.5	107.82
1130	106.72	107.3
1131	106.67	107.36
1132	106.32	106.89
1133	106.37	106.35
1134	105.89	105.94
1135	105.93	105.97
1136	105.35	105.89
1137	101.29	101.3
1138	99.83	99.84
1139	98.95	99.95
1140	98.17	98.95
1141	98.41	98.48
1142	98.22	98.64
1143	98.41	99.13
1144	98.56	99.43
1145	99	99.46
1146	99.15	99.74
1147	99.19	99.54
1148	99.19	99.54
1149	99.68	100.12
1150	99.34	99.57

1151	99.68	99.85
1152	100.32	101.33
1153	100.02	100.36
1154	100.32	99.78
1155	99.98	99.9
1156	100.32	100.15
1157	100.37	101.31
1158	100.85	101.96
1159	100.56	101.27
1160	99.98	99.98
1161	98.51	99.02
1162	96.21	97.2
1163	94.75	94.84
1164	92.16	91.66
1165	89.96	89.69
1166	87.57	87.61
1167	83.96	84.05
1168	80.2	79.65
1169	78.58	77.89
1170	77.02	76.66
1171	73.41	73.88
1172	68.33	68.06
1173	61.88	60.87
1174	56.95	55.41
1175	53.82	53.11
1176	48.84	47.93
1177	39.32	38.49
1178	30.82	29.76
1179	28.18	26.79
1180	24.22	23.81
1181	18.17	17.89
1182	11.82	11.24
1183	5.32	6.13
1184	1.22	6.13
1185	0	0
1186	0	0
1187	0	0
1188	0	0
1189	0	0
1190	0	0
1191	0	0
1192	0	1.35
1193	5.32	9.3
1194	13.68	17.21
1195	22.61	23.7
1196	31.11	31.02
1197	38.34	38.17
1198	43.37	43.25

1199	45.23	43.96
1200	43.86	44.33
1201	40.88	42.3
1202	37.22	37.26
1203	30.13	30.95
1204	21.1	22.45
1205	13.43	14.28
1206	12.01	10.33
1207	16.36	17.59
1208	22.91	27.04
1209	29.99	32.41
1210	36.92	36.34
1211	42.25	41.84
1212	45.27	45.09
1213	45.57	44.98
1214	42.49	44.39
1215	36.83	38.65
1216	30.09	30.67
1217	22.17	23.08
1218	14.51	16.01
1219	10.35	11.01
1220	5.71	7.12
1221	2.69	2.27
1222	2.93	4.1
1223	8.69	11.71
1224	16.7	19.61
1225	24.76	28.01
1226	32.63	36.94
1227	39.71	41.39
1228	43.76	44.54
1229	44.98	45.47
1230	44.05	44.89
1231	40.63	39.58
1232	34.63	34.84
1233	27.06	27.07
1234	18.02	18.25
1235	10.26	10.23
1236	5.91	5.86
1237	4.4	3.48
1238	10.84	8.09
1239	19.39	20.37
1240	26.67	30.43
1241	33.65	36.44
1242	40.34	40.98
1243	46.5	45.48
1244	48.06	48.96
1245	43.66	44.9
1246	36.63	35.79

1247	28.67	27.4
1248	20.76	21.14
1249	13.14	14.22
1250	6.35	5.67
1251	1.51	0
1252	0	0
1253	0	0
1254	0	0
1255	0	0
1256	0	0
1257	0	0
1258	0	0
1259	0	0
1260	7.52	7.37
1261	17.48	17.63
1262	27.84	26.8
1263	36.14	37.39
1264	43.32	45.1
1265	52.89	51.78
1266	59.05	57.94
1267	63.39	62.67
1268	70.04	67.88
1269	77.8	73.42
1270	82	78.87
1271	82.39	82.35
1272	81.51	81.67
1273	80.49	80.79
1274	77.8	79.26
1275	73.21	75.05
1276	67.89	68.85
1277	62.37	62.46
1278	55.82	55.91
1279	47.67	48.88
1280	40.24	41.54
1281	32.67	33.64
	23.79	25.22
	13.43	16.43
	5.76	4.63
	1.32	4.63
	0	0































































**To:** Willem VandenBroek/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; im  
Snyder/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers,  
William (EEO)" [William.Rodgers@vw.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Wed 9/5/2012 12:40:07 PM  
**Subject:** RE: 2013 Bentley Fee Filing Form  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)  
[image001.gif](#)

Hi Bill;

Thank you for the information, you are correct. We only filed one fee filing form for test group DADXT03.03UG with that April 27th, 2012 electronic payment. The other two fees are for test groups which they are deciding whether they will be model year 2013 or 2014, due to SOP delays. We are waiting for a final decision and applications, and to see if they will be processed this calendar year (2012).

Thanks,

Richard

From: Willem VandenBroek [mailto:VandenBroek.Willem@epamail.epa.gov]  
Sent: Friday, August 10, 2012 8:33 AM  
To: Thomas, Richard (EEO)  
Subject: Re: 2013 Bentley Fee Filing Form

Richard,

Looking over our books, I see we had a \$98,034 ACH payment on 4/27, out of which we paid for DADXT03.03UG, leaving \$65,356 unclaimed. FYI.,

Bill

"Thomas, Richard (EEO)" ---08/09/2012 02:48:40 PM---Please find attached the fee filing form for 2013 Bentley Mulsanne test group DBEXV06.84LA. Electr

From: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
To: Fees@EPA  
Cc: Willem VandenBroek/AA/USEPA/US@EPA, "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 08/09/2012 02:48 PM  
Subject: 2013 Bentley Fee Filing Form

Please find attached the fee filing form for 2013 Bentley Mulsanne test group DBEXV06.84LA. Electronic payment will be made on August 9th, 2012.

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

[attachment "2013 EPA Cert Fees DBEXV06.84LA to EPA.pdf" deleted by Willem VandenBroek/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Wed 9/5/2012 2:47:31 PM  
**Subject:** VW Group - Confirmatory test decision information for VID DFUB-Q5A

Hello Jim,

Just a heads up that we submitted E85 exhaust tests and Decision Information for the VID: DFUB-Q5A (Audi Q5 2.0L FFV). A running change to add this vehicle as the new EDV for this test group is forthcoming. Please let us know as soon as possible if you intent to confirm these tests.

PS - We will be submitting additional Audi Q5 3.0L stop-start test data, including Evap. tests, for another test group in the next day. You had expressed interest in confirming the Evap. tests and scheduling it with the recently selected Evap. tests for VID: DFUB-BAQ (Audi A5 Cabriolet).

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; im  
Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 9/5/2012 7:37:09 PM  
**Subject:** VW Group - Confirmatory test decision information for VID D3UF-Q5A

Hello Jim,

I have submitted decision information for the 3.0L Q5, which is a part of a running change for Audi test group DADXJ03.03UF.

Vehicle ID: D3UF-Q5A

New evaporative family: DADXR0140B8B

Configuration 0: FEDV with start stop active / also used for evaporative tests

Configuration 1: FEDV with start-stop Inactive

A running change letter will be submitted today. Manufacturer confirmatory tests are required for High FE for ETW for both configurations.

Please let us know EPA confirmatory decision as soon as possible.

Thanks,

Mike

From: Rodgers, William (EEO)  
Sent: Wednesday, September 05, 2012 10:48 AM  
To: 'Jim Snyder' (Snyder.Jim@epamail.epa.gov)  
Cc: Giles, Michael (EEO)  
Subject: VW Group - Confirmatory test decision information for VID DFUB-Q5A

Hello Jim,

Just a heads up that we submitted E85 exhaust tests and Decision Information for the VID: DFUB-Q5A (Audi Q5 2.0L FFV). A running change to add this vehicle as the new EDV for this test group is forthcoming. Please let us know as soon as possible if you intent to confirm these tests.

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Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219



National Vehicle and Fuel Emissions Laboratory  
2565 Plymouth Road, Ann Arbor, Michigan 48105

EPA Parameters Form for In-Use Coastdown Testing

EPA Vehicle Control Number:   
Equivalent Test Weight:  Pounds (Integer Only: Equivalent Test Weight)  
Nominal Fuel Tank Capacity:  Gallons 40% Fill  Gallons  
Curb Weight   
Drive axle weight w/ full tank of fuel   
Drive Axle:

Coefficient of Drag ( $C_D$ ):  Frontal Area:   
Tread Depth  (original OEM tire spec)  
Suspension Height LF  RF  (please specify measurement procedure)  
LR  RR  (may be submitted at a later time if not available by June 29th)

Mfr. Shift Schedule (if required)  FTP  HWY  US06

Vehicle Target Road-Load Coefficients Canister Working Capacity:  
A  Lb-force  Grams (Integer Only: Canister Working Capacity)  
B  Lb-force/mph  Number of Canisters (Integer Only: Number of Canisters)  
C  Lb-force/mph<sup>2</sup>  Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?  (Y/N)

Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

URS Representative: \_\_\_\_\_ Date: \_\_\_\_\_

EPA Representative: \_\_\_\_\_ Date: \_\_\_\_\_



**To:** "Berenz, Sebastian (EEO)" [Sebastian.Berenz@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/6/2012 4:54:11 PM  
**Subject:** Re: In-use coastdown vehicle scheduled for the week ending 9/21

Hi, Sebastian.

Next Tuesday will be fine.

Thanks.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

**From:** "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
**To:** Lynn Sohacki/AA/USEPA/US@EPA  
**Date:** 09/06/2012 11:43 AM  
**Subject:** Re: In-use coastdown vehicle scheduled for the week ending 9/21

Hello Lynn,

Thank you very much for the information.  
I am currently out of office and will get the data ready for you by tuesday next week.

I hope this is ok.

Best regards,

Sebastian

**From:** Lynn Sohacki [mailto:Sohacki.Lynn@epamail.epa.gov]  
**Sent:** Thursday, September 06, 2012 11:01 AM  
**To:** Berenz, Sebastian (EEO)  
**Subject:** In-use coastdown vehicle scheduled for the week ending 9/21

Hi, Sebastian.

Listed below is the information for the vehicles that we have scheduled:

R309/0062 (2012 VW/Passat) - Ex. 6

Please use the form to send testing information to me for these vehicles before pick-up.

I will pass this information along to our contractor, URS, and lab personnel. Paper copies or e-mails sent

directly to URS or lab personnel may result in incorrect information being distributed.

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax

(See attached file: coastdown parameters form.xlsx)

**To:** wolfgang.wister@tb-wister.com[wolfgang.wister@tb-wister.com];  
 michel.locqufier@mobilit.fgov.be>;[bborojevic@eib-cmv.com]; bborojevic@eib-cmv.com>;[islaveikov@rta.government.bg];  
 islaveikov@rta.government.bg>;[a\_atanassova@aebtri.com];  
 a\_atanassova@aebtri.com>;[cilieva@rta.government.bg];  
 cilieva@rta.government.bg>;[merz.rustom@tc.gc.ca];  
 merz.rustom@tc.gc.ca>;[dan.davis@tc.gc.ca]; dan.davis@tc.gc.ca>;[jan.skrivanek@mdcr.cz];  
 jan.skrivanek@mdcr.cz>;[bjorn.ziessler@trafi.fi];  
 bjorn.ziessler@trafi.fi>;[daniel.kopaczewski@developpement-durable.gouv.fr];  
 daniel.kopaczewski@developpement-durable.gouv.fr>;[bernard.gauvin@numericable.fr];  
 bernard.gauvin@numericable.fr>;"jean" [loup.marduel@utac.com]; jean"  
 [loup.marduel@utac.com]; christoph.albus@bmvs.bund.de>;"ref" [ui44@bmvs.bund.de]; ref"  
 [ui44@bmvs.bund.de]; frank.wrobel@kba.de>;[deak.janos@kti.hu];  
 deak.janos@kti.hu>;[mmatolcsy@gmail.com];  
 mmatolcsy@gmail.com>;[antonio.erario@mit.gov.it];  
 antonio.erario@mit.gov.it>;[janis.liepins@csdd.gov.lv];  
 janis.liepins@csdd.gov.lv>;[jerzy.kownacki@its.waw.pl];  
 jerzy.kownacki@its.waw.pl>;[claudeliesch@snch.lu];  
 claudeliesch@snch.lu>;[cdoornheim@rdw.nl]; cdoornheim@rdw.nl>;[hjongenelen@rdw.nl];  
 hjongenelen@rdw.nl>;[espena@vegvesen.no];  
 espena@vegvesen.no>;[marius.damachi@rarom.ro];  
 marius.damachi@rarom.ro>;[kisulenko@satrfond.ru];  
 kisulenko@satrfond.ru>;[3646026@mail.ru]; 3646026@mail.ru>;[komarov@niiat.ru];  
 komarov@niiat.ru>;[vakutenev@nami.ru]; vakutenev@nami.ru>;[zazhigalkin@mail.ru];  
 zazhigalkin@mail.ru>;[vladan.popovic@gmail.com];  
 vladan.popovic@gmail.com>;[marek.hudec@mindop.sk];  
 marek.hudec@mindop.sk>;[juraj.porazik@slovdekra.sk];  
 juraj.porazik@slovdekra.sk>;[jmprietob@mityc.es];  
 jmprietob@mityc.es>;[heinz.berger@certiconsult.ch];  
 heinz.berger@certiconsult.ch>;[emre.dabak@sanayi.gov.tr];  
 emre.dabak@sanayi.gov.tr>;[fatih.ozcinar@sanayi.gov.tr];  
 fatih.ozcinar@sanayi.gov.tr>;[eu@mtu.gov.ua]; eu@mtu.gov.ua>;[astolyarov@insat.org.ua];  
 astolyarov@insat.org.ua>;[mobility08@mail.ru];  
 mobility08@mail.ru>;[ian.yarnold@dft.gsi.gov.uk];  
 ian.yarnold@dft.gsi.gov.uk>;[christopher.bonanti@dot.gov];  
 christopher.bonanti@dot.gov>;Maureen  
 Delaney/DC/USEPA/US@EPA;[robert.hogan@infrastructure.gov.au]; aureen  
 Delaney/DC/USEPA/US@EPA;[robert.hogan@infrastructure.gov.au];  
 robert.hogan@infrastructure.gov.au>;[thomas.belcher@infrastructure.gov.au];  
 thomas.belcher@infrastructure.gov.au>;[ibeltran@mincomercio.gov.co];  
 ibeltran@mincomercio.gov.co>;[Santiago.schlesinger@ptp.com.co];  
 Santiago.schlesinger@ptp.com.co>;[nr.gokarn@nic.in];  
 nr.gokarn@nic.in>;[urdhwareshe.apx@araiindia.com];  
 urdhwareshe.apx@araiindia.com>;[gopalantc@rediffmail.com];  
 gopalantc@rediffmail.com>;[vishnu.mathur@siam.in]; vishnu.mathur@siam.in>;[dg@siam.in];  
 dg@siam.in>;[Ambujsharma@hotmail.com]; Ambujsharma@hotmail.com>;"onoda"  
 [t2r3@mlit.go.jp]; onoda" [t2r3@mlit.go.jp]; essho@mail.nissan.co.jpè  
 [bessho@mail.nissan.co.xn--jp-8ia]; matsuo" [t2c2@mlit.go.jp];  
 mori@jasic.org>;[ryuzo@oshita.tec.toyota.co.jp];  
 ryuzo@oshita.tec.toyota.co.jp>;[sakai@jasic.org]; sakai@jasic.org>;"sato" [t2kd@mlit.go.jp];  
 sato" [t2kd@mlit.go.jp]; ueno@jasic.org>;[yhjiang@korea.kr];  
 yhjiang@korea.kr>;[hyoung35@ts2020.kr]; hyoung35@ts2020.kr>;"jskim" [katri@ts2020.kr];  
 jskim" [katri@ts2020.kr]; jwlee@ts2020.kr>;[Sonys3559@korea.kr];  
 Sonys3559@korea.kr>;[dg@miros.gov.my]; dg@miros.gov.my>;[siva@mot.gov.my];  
 siva@mot.gov.my>;[fauziana@miros.gov.my]; fauziana@miros.gov.my>;[solah@jpj.gov.my];  
 solah@jpj.gov.my>;[sharulnizam@jpj.gov.my];

sharulnizam@jpj.gov.my>;[l.mortimer@transport.govt.nz];  
l.mortimer@transport.govt.nz>;[morgansj@nrcc.org.za];  
morgansj@nrcc.org.za>;[chuckrit\_tan@dlt.go.th];  
chuckrit\_tan@dlt.go.th>;[carlo.pettinelli@ec.europa.eu];  
carlo.pettinelli@ec.europa.eu>;[philippe.jean@ec.europa.eu]; philippe.jean@ec.europa.eu>[]  
**Cc:** "Kirshenblatt,Morrie [NCR]" [Morrie.Kirshenblatt@ec.gc.ca]; arl  
Simon/DC/USEPA/US@EPA;Linc  
Wehrly/AA/USEPA/US@EPA;[Juan.Ramos.Garcia@unece.org]; inc  
Wehrly/AA/USEPA/US@EPA;[Juan.Ramos.Garcia@unece.org];  
Juan.Ramos.Garcia@unece.org>[]  
**From:** "Daoust,Jessica [NCR]"  
**Sent:** Fri 9/7/2012 6:58:02 PM  
**Subject:** Establishment of the Global Environmental Compliance Network  
EFWG-01-02.pdf  
<http://www2.unece.org/wiki/display/trans/EWG+1st+session>  
[wehrly.linc@epa.gov](mailto:wehrly.linc@epa.gov)  
[morrie.kirshenblatt@ec.gc.ca](mailto:morrie.kirshenblatt@ec.gc.ca)

Sent on behalf of Steve McCauley

Sir / Madame:

I am writing to you in regard to the joint proposal that Canada and the United States of America tabled at the Enforcement Working Group Meeting on June 28, 2012 which was accepted and in which we proposed to establish of an informal network of contacts to discuss compliance issues related to environmental regulations (re: EFWG-01-02). The document is available on the UNECE web site at <http://www2.unece.org/wiki/display/trans/EWG+1st+session> and is attached for your information.

At the meeting the participants agreed to establish an informal network of Contracting Parties to facilitate the exchange of compliance information related to environmental regulations on a voluntary and informal basis. As noted in the Informal Document, the nature and scope of the information to be exchanged is solely at the discretion of individual participants.

The Global Environmental Compliance Network will be a timely forum for government officials to exchange information on compliance issues. As outlined in the informal document the Network will:

1. Serve as a quick notify mechanism in the event of compliance/enforcement (C/E) actions that may have international impacts;
2. Provide that the same server list can be used to share general concerns about areas of concern, share

information on best practices and notify Contracting Parties of any changing requirements;

3. Serve as a quick reference contact list to facilitate any need for bilateral discussions regarding C/E issues. In this case a Contracting Party can feel free to contact another Contracting Party regarding a particular matter.

At this time we would like to establish the contact list. We wish to request that if you are interested in being part of the Global Environmental Compliance Network, please identify members of your government that would be appropriate to participate in such a network so that they can be added to the Network contact list. Participants should be government officials that are directly involved in compliance and enforcement activities related to environmental regulations. Both Canada and the U.S. will actively maintain the Network list. Mr. Linc Wehrly (wehrly.linc@epa.gov) will serve as the coordinator for the US EPA and Mr. Morrie Kirshenblatt will serve as the coordinator for Environment Canada.

Please, send your contact information to morrie.kirshenblatt@ec.gc.ca, including; country, organization name, individual's name and title along with their email address, mail address and phone contact information. Our plan is to send to all interested parties the Network list of confirmed contacts before the next WP.29 meeting scheduled for November, 2012.

Should you have any questions related to this initiative, please do not hesitate to contact us at any time.

Thank you for your consideration,

Karl Simon

Director, Transportation and Climate Division

Office of Transportation and Air Quality

U.S. Environmental Protection Agency

Steve McCauley

Director General, Energy and Transportation Directorate

Environment Canada



---

JOINT PROPOSAL FROM CANADA AND THE UNITED STATES OF AMERICA TO  
SET-UP AN INFORMAL NETWORK OF CONTACTS FOR CONTRACTING  
PARTIES TO DISCUSS COMPLIANCE ISSUES RELATED TO  
ENVIRONMENTAL REGULATIONS

The United States of America (USA) and Canada propose that an informal voluntary network of contacts be established for Contracting Parties to discuss and exchange information on compliance issues related to the administration of domestic environmental regulations.

**Background:**

A kick-off meeting of the Enforcement Working Group was held November 17<sup>th</sup>, 2011 during the 155<sup>th</sup> session of the WP.29. At this meeting, the United States EPA and Environment Canada experts suggested that due to the sensitive nature of compliance information, informal and voluntary discussions between Contracting Parties (CPs) related to international environmental compliance interests would be helpful. The full disclosure of certain compliance information in the public domain is often not possible and could have negative implications on the investigation of specific allegations. However, there would be benefit in Contracting Parties informally sharing compliance information on environmental regulations and enforcement activities in light of the global nature of trade in the automotive industry. Sharing of this type of information can assist regulatory agencies to more effectively design the administration of their respective regulatory programs on issues with higher suspected non-compliance. This exchange of information could also be used by countries to better inform their domestic manufacturers of requirements in other countries and reduce the exportation of non-compliant products. The network can also be used to provide opportunities to exchange information on best practices that encourage compliance and avoid enforcement. Finally, such communication would help to ensure global manufacturers and suppliers of compliant products which could be placed at a competitive disadvantage compared to companies offering non-compliant products if violations were to go unheeded in some jurisdictions.

**Proposal:**

That an informal network of contacts be established to facilitate communication on compliance issues related to environmental regulations. The operating principles for this network of contacts would be as follows:

1. Develop a Contracting Party contact list (email, address and phone contact info) that would have no more than two-three contacts per Contracting Party;

2. The first use would be to serve as a quick notify mechanism in the event of compliance / enforcement (C/E) actions that may have international impacts;
3. Provide that the same server list can be used to share general concerns about areas of concern, share information on best practices and notify Contracting Parties of any changing requirements in the manner of C/E;
4. The list could also serve for the use in the need of bilateral discussions regarding C/E issues. In this case a Contracting Party can feel free to contact another Contracting Party about a particular matter when deemed appropriate.
5. The exchange of compliance information by a Contracting Party would be entirely voluntary and the means of exchanging this information would be at the discretion of the Contracting Party. Conversely, accepting information from another Contracting party would also be at a Contracting Party's discretion.

The network and information exchange would be open to any interested Contracting Party that has provided contact information.

**Proposed Next Steps:**

1. Establishment of the network of contacts, to maintain a list of contacts.
  - ☐ The US and Canada will work with the WP.29 secretariat to notify all CPs of the establishment of the network
  - ☐ Within 5 months (by November WP.29) the list will be fully established and will be operational and distributed by email to all interested CPs.
  - ☐ Canada and the US will work to actively to maintain the accuracy of the list calling upon all interested CPs to notify the Representatives of Canada and the US of any changes in personal
2. From time-to-time informal discussions could be held on the margins of the WP.29 for the exchange of environmental information and will be noticed through the network.



**To:** Byron Bunker/AA/USEPA/US@EPA[]  
**From:** Anup Bandivadekar  
**Sent:** Sun 9/9/2012 4:11:48 PM  
**Subject:** Fwd: EFV Conference Update  
[mime.htm](#)  
[EFV\\_EC\\_JRC\\_2012\\_MW.ppt](#)  
(embedded image)

FYI

Begin forwarded message:

> From: Pierre Bonnel <pierre.bonnel@jrc.ec.europa.eu>  
> Date: September 6, 2012 6:08:48 AM EDT  
> To: Anup Bandivadekar <anup@theicct.org>  
> Cc: "WEISS Martin (JRC-ISPRA)" <martin.weiss@jrc.ec.europa.eu>  
> Subject: Re: EFV Conference Update  
>  
> Dear Anup,  
>  
> Please find attached the slides. I have extracted them from the ones I was planning to present  
> and kept only the very general ones, thus providing an overview of what's being done in Europe  
> at regulatory level for real emissions.  
>  
> They should be self explanatory and easy to read, but it goes without saying that you can contact me  
> or my colleague Martin (cc) in case of questions.  
>  
> Kind Regards,  
>  
> Pierre  
>  
> On 05/09/2012 02:51, Anup Bandivadekar wrote:  
>> Dear Pierre,  
>>  
>> I just forwarded to you a draft presentation from Bill Coleman. I'd really appreciate it if you could send  
>> your slides to me tomorrow, or Thursday at the latest.  
>>  
>> Also, Werner Tober from Austria is going to be at the conference. Do you think that he would have  
>> something to say on the topic?  
>>  
>> Best,  
>>  
>> Anup  
>>  
>> \_\_\_\_\_  
>> Anup Bandivadekar  
>>  
>> Passenger Vehicles Program Lead  
>> International Council on Clean Transportation (ICCT)  
>> 1 Post Street Suite 2700  
>> San Francisco CA 94104  
>>  
>> (415)-202-5754

>> anup@theicct.org  
>>  
>> On Sep 4, 2012, at 2:40 AM, Pierre Bonnel wrote:  
>>  
>>> Dear Anup,  
>>>  
>>> I will do this with great pleasure. Chris Albus or Philippe Jean might be able general information only.  
>>> Bill Coleman (from ACEA, VW) should be in an excellent position to provide details as he's a member of the relevant experts groups.  
>>> I will send him a short note to explain the situation.  
>>>  
>>> Kind Regards,  
>>>  
>>> Pierre  
>>>  
>>> On 04/09/2012 08:25, Anup Bandivadekar wrote:  
>>>> Dear Pierre,  
>>>>  
>>>> While it is quite unfortunate that you will not be coming to the EFV conference, I was wondering if you might still like to send in a short presentation. The presentation need not be as exhaustive as it would be if you were here, but could touch upon the key points you'd like to make. You can add notes to the presentation, and we can discuss your slides beforehand. Then, I will be happy to walk the audience through those slides, and I was thinking of requesting either Chris Albus or Jean Philipe to take the stage and add any thoughts to this from their point of view.  
>>>>  
>>>> What do you think about this? I'd really appreciate it if we can make this work.  
>>>>  
>>>> Thanks,  
>>>>  
>>>> Anup  
>>>>  
>>>> \_\_\_\_\_  
>>>> Anup Bandivadekar  
>>>>  
>>>> Passenger Vehicles Program Lead  
>>>> International Council on Clean Transportation (ICCT)  
>>>> 1 Post Street Suite 2700  
>>>> San Francisco CA 94104  
>>>>  
>>>> (415)-202-5754  
>>>> anup@theicct.org  
>>>>  
>>>> On Sep 3, 2012, at 3:13 AM, Pierre Bonnel wrote:  
>>>>  
>>>>> Dear Mr. Simon, Dear Anup, Dear conference organizers,  
>>>>>  
>>>>> I am sorry to inform you that my application to participate to the the EFV conference has not been approved.  
>>>>> No justification was given so far but the rejection is most likely due to the budget restrictions faced by our organization.  
>>>>>  
>>>>> I personally deeply regret the decision as the EFV conference was an important opportunity to share our views on the future EU vehicle emissions regulations.

&gt;&gt;&gt;

>>> \_\_\_\_\_  
>>> Dr. PIERRE BONNEL  
>>> Scientific Officer  
>>> <ec-logo.png>  
>>> European Commission  
>>> Joint Research Centre  
>>> Unit F08 - Sustainable Transport  
>>>  
>>> Via E. Fermi 2749, TP 441  
>>> I- 27027 Ispra, Italy  
>>> Tel : +39 0332 785301  
>>> pierre.bonnel@jrc.ec.europa.eu  
>>> www.iet.jrc.ec.europa.eu  
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>  
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**Cc:** "WEISS Martin (JRC-ISPRA)" <[martin.weiss@jrc.ec.europa.eu](mailto:martin.weiss@jrc.ec.europa.eu)>  
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Best,

Anup

---

Anup Bandivadekar

Passenger Vehicles Program Lead  
International Council on Clean Transportation (ICCT)

1 Post Street Suite 2700  
San Francisco CA 94104  
(415)-202-5754  
[anup@theicct.org](mailto:anup@theicct.org)

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Thanks,

Anup

---

**Anup Bandivadekar**

**Passenger Vehicles Program Lead  
International Council on Clean  
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San Francisco CA 94104  
(415)-202-5754  
[anup@theicct.org](mailto:anup@theicct.org)**

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No justification was  
given so far but the  
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faced by our  
organization.

I personally deeply  
regret the decision as  
the EFV conference  
was an important  
opportunity to share  
our views on the  
future EU vehicle  
emissions regulations.

I kindly ask you to

accept our apologies  
for the inconvenience  
it is causing.

Kind Regards,

---

**Dr. PIERRE BONNEL**  
Scientific Officer

<Mail Attachment.png>  
**European Commission**  
Joint Research Centre  
Unit F08 - Sustainable  
Transport

Via E. Fermi 2749, TP 441  
I- 27027 Ispra, Italy  
Tel : +39 0332 785301  
[pierre.bonnel@jrc.ec.europa.eu](mailto:pierre.bonnel@jrc.ec.europa.eu)  
[www.iet.jrc.ec.europa.eu](http://www.iet.jrc.ec.europa.eu)

On 30/08/2012 23:46,  
Karl Simon wrote:

Dear  
EFV  
Speaker.

We are  
looking  
forward  
to  
Greener  
Global  
Transport:  
The 5th  
International  
Environmentally  
Friendly  
Vehicle  
Conference,  
in  
Baltimore,  
Maryland  
on  
September  
10-12,

According  
to our  
records,



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hotel,  
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Hilton.  
If you  
need a  
reservation,  
the  
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a new  
environmentally  
certified  
hotel  
that is  
connected  
to the  
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It is  
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reservations  
now,  
please  
visit

[http://www.hilton.com/en/hi/groups/personalized/B/BWICCHH-EPA-20120906/index.jhtml?WT.mc\\_id=POG](http://www.hilton.com/en/hi/groups/personalized/B/BWICCHH-EPA-20120906/index.jhtml?WT.mc_id=POG)

If you  
choose  
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please  
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indicate  
that you  
are with  
the  
EFV  
Conference.

Also, if  
you  
have  
not yet  
registered  
for the  
conference  
as a  
speaker,  
please  
do so at  
[www.EFV2012.com](http://www.EFV2012.com)

Its  
going to  
be a  
great  
conference!  
To see  
the  
latest  
agenda  
and line  
up of

advanced  
technology  
vehicles  
on  
display  
visit  
please  
the  
conference  
website  
at  
([www.efv2012.com](http://www.efv2012.com)).

See  
you in  
Baltimore

Karl  
Simon  
US  
EPA

---

**Dr. PIERRE BONNEL**  
Scientific Officer

<ec-logo.png>  
**European Commission**  
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---

**Dr. PIERRE BONNEL**

Scientific Officer



# **Future EU vehicle emissions regulations:**

**- Principles and requirements for real-world emissions -**

**EFV Conference**

**Panel «Realising World Emission Reductions»**

**September 2012, Baltimore, USA**

**Pierre Bonnel, Martin Weiss**

**European Commission DG - Joint Research Centre (JRC)**

**IET - Institute for Energy and Transport**

- **Background**
- **Expectations of the legislators**
- **Existing regulatory elements**
- **Underlying principles for implementing real-world requirements**
- **Critical issues**
- **On-going regulatory efforts**

- **EU Air Quality Directives**

- **Persisting NO<sub>2</sub> exceedances in urban areas despite more stringent emissions standards**
- **Main contributor is road transport, significant deviations between actual and expected NO<sub>x</sub> emissions**

- **Strategy for climate and GHG emissions**

- **Long term vision for transport in Europe - 2011 Transport White Paper:**

- **60% CO<sub>2</sub> reduction over the 1990 levels by 2050**
- **Halve the use of 'conventionally fuelled' cars in urban transport by 2030; phase them out in cities by 2050**

# Expectations of the legislators



- To have clean vehicles on the road and not only in the test cell
- To improve the ability to measure and quantify the real life emissions
- To push for an optimized design of emissions control technologies within the normal operating conditions
- To introduce cost-efficient<sup>1</sup> regulatory tools, able to cope with the upcoming technologies and limiting the use of defeat devices/strategies



# Existing regulatory elements



- **EURO VI 582/2011 & 64/2012: In-Service Conformity and type approval for heavy-duty engines, based on real-world vehicle testing with portable measuring equipment (PEMS)**
- **Verifies conformity of heavy-duty engines on vehicles during normal driving – at type approval and during their normal life (“In-Service”)**
- **Does not explicitly include to ‘real-world’ emissions requirements but provides a functional and performance check of the emissions control technologies**

# Underlying principles (1)



- **Range of applicable normal vehicle operating conditions**

- Ambient temperature, atmospheric pressure
- Vehicle/engine condition (cold/hot) and usage (e.g. speed, acceleration, engine power)

- **Testing**

- Under real on-road driving conditions with Portable Emissions Measurement Systems (PEMS) as 'golden' method

# Underlying principles (2)



- **Data evaluation rules<sup>1</sup>**
  - **Suitable averaging principles and statistics need to be developed due to variability of conditions within a test and longer test durations than for the conventional laboratory tests.**
- **Not To Exceed principle**
  - **Vehicle/engine need to comply within the range of predefined operating conditions**
- **Decisions made from sound statistical methods and samples of vehicles/engines**

- **Portable instrumentation for light-duty vehicles**
  - Power consumption, size and weight acceptable for heavy-duty vehicles
  - Equipment needs to be smaller for light-duty vehicles
- **Definition of boundary conditions in which the real-world requirements must be fulfilled**
- **Engine/vehicle development processes will become more challenging<sup>1</sup>**

## •Euro VI Heavy-Duty

- Review of procedures (practicability, implementation) by 2014
- Assessment of existing requirements to check whether they ensure that EURO VI+ engines are sufficiently clean

## •Stage IV/V? Non-Road Mobile Machinery

- In-service conformity, adaptation of heavy-duty procedures

## •Euro 6 Light-Duty

- “Real Driving Emissions”
- (Technical) performance evaluation procedures under development by end 2013
- Testing with PEMS and/or laboratory random cycle

• **Many thanks for your attention !!!**

• **For further information, please contact:**

• **Pierre Bonnel – EC JRC – [pierre.bonnel@jrc.ec.europa.eu](mailto:pierre.bonnel@jrc.ec.europa.eu)**

• **Nikolaus Steininger – EC DG ENTR – [\\_nikolaus.steining@ec.europa.eu](mailto:_nikolaus.steining@ec.europa.eu)**

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Tue 9/11/2012 1:23:42 PM  
**Subject:** VW Group - EVAP Test Schedule

Hello Jim,

We would like to request that the Audi A5 Cabriolet, VID: DFUB-BAQ, selected for Evap testing be scheduled for delivery to EPA on October 29 with testing on October 31.

I am also getting ready to submit new test data for an Audi A8 with 3.0l TDI diesel and stop-start. This will be requested for the week prior (Oct 22nd.) if selected for testing.

Let me know if this A5 schedule works for you.

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Tue 9/11/2012 1:54:29 PM  
**Subject:** Volkswagen Meeting with EPA - Proposal

Hello Jim:

As you know, we have some vehicles at EPA next week for confirmatory testing. There are some colleagues from VWAG Germany that will accompany the test vehicles. This includes Mr. Juergen Peter and Ms. Hannah Schlueter. I have been asked if it would be possible to have a brief, perhaps one hour, meeting with you and other EPA staff, while Mr. Peter and Ms. Schlueter are in Ann Arbor. The topic would concentrate on emission testing, including evaporative emission testing for future advanced technology vehicles.

My proposal would be September 20 or 21, 2012, late morning or early afternoon. Please let me know if you agree to meet with us and what time may be most convenient for you.

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com



**To:** Joel Ball/AA/USEPA/US@EPA[]  
**Cc:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Ballin, Ralph (K-GQP/1)" [Ralph.Ballin@volkswagen.de]; Braun, Hubert-Martin (I/GS-6)" [hubert.braun@audi.de]  
**From:** "Hennard, Mike (EEO)"  
**Sent:** Tue 9/11/2012 2:28:40 PM  
**Subject:** Notification of Pro Active Extended Warranty by VWGoA - Secondary Air Pressure Sensor  
[mike.hennard@vw.com](mailto:mike.hennard@vw.com)

Joel:

Volkswagen Group of America has decided to proactively extend the Federal Emissions Warranty ( to full useful life) for replacement of the Secondary Air Pressure Sensor on the following 2.5L Volkswagen vehicles in the US market:

Test Group	Affected Models	Emissions Concept
9VWXV02.5257	Volkswagen Jetta / Jetta Sportwagen	LEV II – SULEV / Tier 2 – Bin 2
AVWXV02.5259	Volkswagen Jetta / Jetta Sportwagen	LEV II – SULEV / Tier 2 – Bin 3
BVWXV02.5259	Volkswagen Jetta / Jetta Sportwagen	LEV II – SULEV / Tier 2 – Bin 3
CVWXV02.5259 CW: 47/ 11)	Volkswagen Jetta / Jetta Sportwagen	LEV II – SULEV / Tier 2 – Bin 3 (<

Replacement parts installed on vehicles within this extended warranty will be manufactured with improved process from a new vendor to assure that the highest quality level component is installed on customer vehicles. Customers will be notified of this extended warranty program in the near future and the proper VERR reports (with additional details) will be submitted to EPA when supporting documents become available.

As usual, if you have any questions, please do not hesitate to contact me directly.

Michael Hennard

Senior Manager - Emissions Compliance EEO

Volkswagen Group of America

3800 Hamlin Road

Auburn Hills, MI 48326

Telephone Number: 248 754 4202

Fax: 248 754 4207

mike.hennard@vw.com

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian (EEO)"  
**Sent:** Tue 9/11/2012 3:36:10 PM  
**Subject:** EPA cost down program  
[coastdown parameters form](#) **Ex. 6** [xlsx](#)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

Attached you will find all the data required for the cost down test.

By now I got all the data ready for you. If you don't hear anything back from me this data is correct and Germany confirmed it. If not I will send you an update within the next few days.

I also checked the data on the vehicle and found that it is equipped with 215/55 R17 tires. The vehicle we rolled during the certification process had 215/60 R16 tires. That might cause different results.

In case you want to change the tires we can assist and provide some for you.

Vehicle specs:

MY2012 Passat Comfort PZEV

CVWXXV02.5259

Engine – CBUA 2.5L 170hp

Transmission - MAN 125 A6F

Tires - All-weather tires 215/55 R17 94H (NAR)

Let me know if you need any further information or any assistance.

Best regards,

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



# National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

## EPA Parameters Form for In-Use Coastdown Testing

EPA Vehicle Control Number:

Ex. 6

Equivalent Test Weight:

3500 Pounds

(Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:

18.5 Gallons

40% Fill

7.4 Gallons

Curb Weight

3225

Drive axle weight w/ full tank of fuel

1925

Drive Axle:

front

Coefficient of Drag ( $C_D$ ):

0.297

Frontal Area:

2.28 m<sup>2</sup>

Tread Depth

215/55 R17 (original OEM tire spec)

Suspension Height

LF

690 mm

RF

690 mm

(please specify measurement procedure)

LR

685 mm

RR

685 mm

(may be submitted at a later time if not available by June 29th)

Mfr. Shift Schedule (if required)

n.a. FTP

n.a. HWY

n.a. US06

Vehicle Target Road-Load Coefficients

A 31.00 Lb-force

125 Grams

(Integer Only: Canister Working Capacity)

B 0.5100 Lb-force/mph

1

Number of Canisters (Integer Only: Number of Canisters)

C 0.01330 Lb-force/mph<sup>2</sup>

2500

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?

N (Y/N)

Vehicle Starting Instructions, including Traction Control disabling:

press and hold ESP button

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

VW representatives will assist EPA personell

Fuel Draining Process:

VW representatives will assist EPA personell

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

n.a.

Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative:

Date:

URS Representative:

Date:

EPA Representative:

Date:

**To:** "Berenz, Sebastian (EEO)" [Sebastian.Berenz@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Tue 9/11/2012 6:08:28 PM  
**Subject:** Re: FW: EPA cost down program  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>

Thank you, Sebastian.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 09/11/2012 01:54 PM  
Subject: FW: EPA cost down program

Hello Lynn,

Sorry, but I misunderstood the sheet.  
I just took some time and look the data over.

The data in the sheet was always the data of the vehicle you will test. The only thing I was wrong on was the tire, I thought you want the original tire we used during the certification process.  
So I changed the sheet according to the tire spec. Everything else is good to go.

Let me know if there is anything else.

Please use the attached file.

Best regards,

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211

Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: sebastian.berenz@vw.com

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Berenz, Sebastian (EEO)  
Sent: Tuesday, September 11, 2012 8:36 AM  
To: Lynn Sohacki (Sohacki.Lynn@epamail.epa.gov)  
Subject: EPA cost down program

Hello Lynn,

Attached you will find all the data required for the cost down test.  
By now I got all the data ready for you. If you don't hear anything back from me this data is correct and Germany confirmed it. If not I will send you an update within the next few days.

I also checked the data on the vehicle and found that it is equipped with 215/55 R17 tires. The vehicle we rolled during the certification process had 215/60 R16 tires. That might cause different results.  
In case you want to change the tires we can assist and provide some for you.

Vehicle specs:  
MY2012 Passat Comfort PZEV  
CVWXV02.5259  
Engine – CBUA 2.5L 170hp  
Transmission - MAN 125 A6F  
Tires - All-weather tires 215/55 R17 94H (NAR)

Let me know if you need any further information or any assistance.

Best regards,

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

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E-Mail: sebastian.berenz@vw.com

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[attachment "coastdown parameters form\_ **Ex. 6** .xlsx" deleted by Lynn Sohacki/AA/USEPA/US]



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Tue 9/11/2012 8:26:28 PM  
**Subject:** Audi Meeting with EPA - Proposal

Hello Jim:

I wrote to you earlier today to request a meeting with some VWAG colleagues toward the end of next week. I hope that we can work that out. I am writing again to ask for an additional meeting at the end of October. In this case it would be with our colleagues from Audi AG

We propose a meeting at one of the following times:

- Monday, October 29 2012; afternoon
- Tuesday, October 30, 2012; morning

We would appreciate a three-hour time slot. Proposed discussion topics include:

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation
- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; N=Ben Haynes/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 9/11/2012 9:52:09 PM  
**Subject:** Re: VW Group - EVAP Test Schedule

Ben, have you seen the test request for vehicle DFUB-BAQ on your side?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>  
Date: 09/11/2012 09:27 AM  
Subject: VW Group - EVAP Test Schedule

Hello Jim,  
We would like to request that the Audi A5 Cabriolet, VID: DFUB-BAQ, selected for Evap testing be scheduled for delivery to EPA on October 29 with testing on October 31.

I am also getting ready to submit new test data for an Audi A8 with 3.0l TDI diesel and stop-start. This will be requested for the week prior (Oct 22nd.) if selected for testing.  
Let me know if this A5 schedule works for you.

Bill Rodgers  
VWGoA EEO  
(248) 754-4219

**To:** CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; eonard.Kata@vw.com[]  
**Cc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 9/11/2012 11:10:44 PM  
**Subject:** Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles

---

Hello Jim:

As you know, we have some vehicles at EPA next week for confirmatory testing. There are some colleagues from VWAG Germany that will accompany the test vehicles. This includes Mr. Juergen Peter and Ms. Hannah Schlueter. I have been asked if it would be possible to have a brief, perhaps one hour, meeting with you and other EPA staff, while Mr. Peter and Ms. Schlueter are in Ann Arbor. The topic would concentrate on emission testing, including evaporative emission testing for future advanced technology vehicles.

My proposal would be September 20 or 21, 2012, late morning or early afternoon. Please let me know if you agree to meet with us and what time may be most convenient for you.

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

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**Cc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 9/11/2012 11:10:44 PM  
**Subject:** Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles

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Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 9/11/2012 11:44:41 PM  
**Subject:** Re: VW Group - Confirmatory test decision information for VID DFUB-Q5A

Bill, I was looking over the running change Certificate request on Test Group DADXJ02.0FUB and noticed it wasn't a conditional. Since its a running change on a conditional certificate I think it has to be a conditional too.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Cc:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**Date:** 09/05/2012 10:47 AM  
**Subject:** VW Group - Confirmatory test decision information for VID DFUB-Q5A

Hello Jim,  
Just a heads up that we submitted E85 exhaust tests and Decision Information for the VID: DFUB-Q5A (Audi Q5 2.0L FFV). A running change to add this vehicle as the new EDV for this test group is forthcoming. Please let us know as soon as possible if you intent to confirm these tests.

PS - We will be submitting additional Audi Q5 3.0L stop-start test data, including Evap. tests, for another test group in the next day. You had expressed interest in confirming the Evap. tests and scheduling it with the recently selected Evap. tests for VID: DFUB-BAQ (Audi A5 Cabriolet).

Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219



**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA[]; N=Chris Nevers/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Wed 9/12/2012 12:33:52 PM  
**Subject:** RE: Request for US06 Drive Trace  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
(embedded image)

Mike,

Thank you for your response. I am wondering, if per our original request, if the factory has any 10 hz data, or if the only data available are 1 hz?

EPA may be requesting additional drive trace data from certification tests in the future and will be requesting the data in the format specified by SAEJ2951. Please do not hesitate to contact me if you require additional information or have further questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** DavidA Wright/AA/USEPA/US@EPA  
**Cc:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 09/05/2012 08:36 AM  
**Subject:** RE: Request for US06 Drive Trace

Hello David,

Please find attached the drive trace that the factory provided for this test.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, August 23, 2012 9:09 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: RE: Request for US06 Drive Trace

Mike,

Thanks for your reply, I look forward to receiving the data once it has been provided by the factory. Please let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

"Giles, Michael (EEO)" ---08/23/2012 08:05:42 AM---David, I have forwarded your request to our factory and will reply with the information as soon as i

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/23/2012 08:05 AM  
Subject: RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]

Sent: Wednesday, August 22, 2012 3:54 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace  
Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\* [attachment

"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA[]; N=Chris Nevers/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Wed 9/12/2012 12:33:52 PM  
**Subject:** RE: Request for US06 Drive Trace  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
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\*\*\*\*\* [attachment

"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Giles, Michael" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 9/12/2012 12:37:04 PM  
**Subject:** Re: VW Group - EVAP Test Schedule

Bill, Ben said he hasn't seen the test request for this vehicle. 10/31 sounds okay as a test date but you have to submit all the supplemental info along with the test date before Ben will see and schedule it.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** Jim Snyder/AA/USEPA/US  
**To:** "Rodgers, William (EEO)" <William.Rodgers@vw.com>, Ben Haynes/AA/USEPA/US@EPA  
**Date:** 09/11/2012 05:52 PM  
**Subject:** Re: VW Group - EVAP Test Schedule

Ben, have you seen the test request for vehicle DFUB-BAQ on your side?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
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Let me know if this A5 schedule works for you.

Bill Rodgers  
VWGoA EEO  
(248) 754-4219



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Wed 9/12/2012 1:37:52 PM  
**Subject:** RE: VW Group - Confirmatory test decision information for VID DFUB-Q5A  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)

Thanks Jim, I will resubmit the Q5 Certificate request as conditional. I hadn't thought about that already being conditional.

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, September 11, 2012 7:45 PM  
To: Rodgers, William (EEO)  
Subject: Re: VW Group - Confirmatory test decision information for VID DFUB-Q5A

Bill, I was looking over the running change Certificate request on Test Group DADXJ02.0FUB and noticed it wasn't a conditional. Since its a running change on a conditional certificate I think it has to be a conditional too.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>  
Date: 09/05/2012 10:47 AM  
Subject: VW Group - Confirmatory test decision information for VID DFUB-Q5A

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PS - We will be submitting additional Audi Q5 3.0L stop-start test data, including Evap. tests, for another

test group in the next day. You had expressed interest in confirming the Evap. tests and scheduling it with the recently selected Evap. tests for VID: DFUB-BAQ (Audi A5 Cabriolet).

Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** Verify Help Desk [verifyhelp@csc.com]; Giles, Michael (EEO)"  
[michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Wed 9/12/2012 3:03:09 PM  
**Subject:** RE: VW Group - Confirmatory test decision information for VID DFUB-Q5A  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)

Jim,

I did receive your Cert request denial but have not been able to access the Verify Certification Request screen to process the revised conditional request. I'll try again later I guess?

PS – I was able to processed a Decision Information correction for the pending A5 Cabriolet Evap test (VID DFUB-BAQ) to change the delivery date to Oct 29th, and also processed the related Supplemental Information with seemingly no Verify problems.

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, September 11, 2012 7:45 PM  
To: Rodgers, William (EEO)  
Subject: Re: VW Group - Confirmatory test decision information for VID DFUB-Q5A

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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
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[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William (EEO)" <[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)>  
To: Jim Snyder/AA/USEPA/US@EPA

Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>  
Date: 09/05/2012 10:47 AM  
Subject: VW Group - Confirmatory test decision information for VID DFUB-Q5A

Hello Jim,

Just a heads up that we submitted E85 exhaust tests and Decision Information for the VID: DFUB-Q5A (Audi Q5 2.0L FFV). A running change to add this vehicle as the new EDV for this test group is forthcoming. Please let us know as soon as possible if you intent to confirm these tests.

PS - We will be submitting additional Audi Q5 3.0L stop-start test data, including Evap. tests, for another test group in the next day. You had expressed interest in confirming the Evap. tests and scheduling it with the recently selected Evap. tests for VID: DFUB-BAQ (Audi A5 Cabriolet).

Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219



National Vehicle and Fuel Emissions Laboratory  
2565 Plymouth Road, Ann Arbor, Michigan 48105

EPA Parameters Form for In-Use Coastdown Testing

EPA Vehicle Control Number:

Ex. 6

Equivalent Test Weight:

3625 Pounds

(Integer Only: Equivalent Test Weight)

Nominal Fuel Tank Capacity:

18.5 Gallons

40% Fill

7.4 Gallons

Curb Weight

3325

Drive axle weight w/ full tank of fuel

1969

Drive Axle:

front

Coefficient of Drag ( $C_D$ ):

0.297

Frontal Area:

2.28 m<sup>2</sup>

Tread Depth

215/55 R17 (original OEM tire spec)

Suspension Height

LF

690 mm

RF

690 mm

(please specify measurement procedure)

LR

685 mm

RR

685 mm

(may be submitted at a later time if not available by June 29th)

Mfr. Shift Schedule (if required)

n.a. FTP

n.a. HWY

n.a. US06

Vehicle Target Road-Load Coefficients

A 31.00 Lb-force

125 Grams

(Integer Only: Canister Working Capacity)

B 0.5100 Lb-force/mph

1

Number of Canisters (Integer Only: Number of Canisters)

C 0.01330 Lb-force/mph<sup>2</sup>

2500

Total Canister Volume (cm<sup>3</sup>)

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)?

N (Y/N)

Vehicle Starting Instructions, including Traction Control disabling:

press and hold ESP button

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

VW representatives will assist EPA personell

Fuel Draining Process:

VW representatives will assist EPA personell

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

n.a.

Comments:

For internal EPA Use Only:

This information was obtained from:

- \* Letter, e-mail, fax or other document delivered from the manufacturer  
(attach any additional information from the manufacturer to this form)
- \* Verbal instruction from the manufacturer's representative
- \* Other (specify)

Manufacturer Representative:

Date:

URS Representative:

Date:

EPA Representative:

Date:

**To:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 9/12/2012 3:37:48 PM  
**Subject:** Re: Audi Meeting with EPA - Proposal

Hi Len , I got your note yesterday. I'm just thinking about who to invite since you mentioned Tier 3. We usually try to limit mtgs to 2 hours. I rather push them into condensing their discussion down to that.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rech, Lothar (I/EA-523)" <Lothar.Rech@AUDI.DE>, "Rist, Domenic (I/EA-523)" <Domenic.Rist@audi.de>, "Schmidt, Oliver (EEO)" <Oliver.Schmidt@vw.com>  
Date: 09/11/2012 04:27 PM  
Subject: Audi Meeting with EPA - Proposal

Hello Jim:

I wrote to you earlier today to request a meeting with some VWAG colleagues toward the end of next week. I hope that we can work that out. I am writing again to ask for an additional meeting at the end of October. In this case it would be with our colleagues from Audi AG

We propose a meeting at one of the following times:

- Monday, October 29 2012; afternoon
- Tuesday, October 30, 2012; morning

We would appreciate a three-hour time slot. Proposed discussion topics include:

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation
- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**To:** "Berenz, Sebastian (EEO)" [Sebastian.Berenz@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Wed 9/12/2012 3:37:50 PM  
**Subject:** Re: EPA cost down program  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Thanks, Sebastian.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

From: "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 09/12/2012 11:19 AM  
Subject: EPA cost down program

Hello Lynn,

I have an update from Germany for this vehicle. The weight wasn't correct on the first sheet.

Sorry about that.

Best regards,

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!  
[attachment "coastdown parameters form\_ **Ex. 6** 2.xlsx" deleted by Lynn  
Sohacki/AA/USEPA/US]





**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** [REDACTED] **Ex. 7**  
**Sent:** Wed 9/12/2012 3:42:29 PM  
**Subject:** Accepted: Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Sigelko, Jenny (EEO)"  
**Sent:** Wed 9/12/2012 4:44:11 PM  
**Subject:** Accepted: FW: Invitation: Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles (Sep 20 01:00 PM EDT in AA-N62-ASD&CD/AA-OTAQ-OFFICE@EPA)  
[winmail.dat](#)  
[message\\_body.rtf](#)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Wed 9/12/2012 5:05:09 PM  
**Subject:** RE: Audi Meeting with EPA - Proposal

Hello Jim:

I will let my Audi colleagues know about the time limit. Otherwise I will wait to hear which date works best for you.

Thanks,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, September 12, 2012 11:38 AM  
To: Kata, Leonard (EEO)  
Subject: Re: Audi Meeting with EPA - Proposal

Hi Len , I got your note yesterday. I'm just thinking about who to invite since you mentioned Tier 3. We usually try to limit mtgs to 2 hours. I rather push them into condensing their discussion down to that.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rech, Lothar (I/EA-523)" <Lothar.Rech@AUDI.DE>, "Rist, Domenic (I/EA-523)" <Domenic.Rist@audi.de>, "Schmidt, Oliver (EEO)" <Oliver.Schmidt@vw.com>  
Date: 09/11/2012 04:27 PM  
Subject: Audi Meeting with EPA - Proposal

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- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
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- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; im Snyder/AA/USEPA/US@EPA[]  
**From:** Ex. 6  
**Sent:** Wed 9/12/2012 5:13:21 PM  
**Subject:** RE: VW Group - Confirmatory test decision information for VID DFUB-Q5A (HLP-2914)

Hello Mr. Rodgers,

Verify help desk ticket HLP-2914 has been opened for your inquiry. CDX is still experiencing issues that are impacting submission made in Verify. I will provide an update as soon as I have a status.

Ex. 6

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Rodgers, William  
(EEO)"  
<William.Rodgers@vw.com> To  
Jim Snyder  
<Snyder.Jim@epamail.epa.gov>  
09/12/2012 11:03 cc  
AM Verify Help Desk@CSC, "Giles,  
Michael (EEO)"  
<michael.giles@vw.com>  
Subject  
RE: VW Group - Confirmatory test  
decision information for VID  
DFUB-Q5A

Jim,

I did receive your Cert request denial but have not been able to access the Verify Certification Request screen to process the revised conditional request. I'll try again later I guess?

PS – I was able to processed a Decision Information correction for the pending A5 Cabriolet Evap test (VID DFUB-BAQ) to change the delivery date to Oct 29th, and also processed the related Supplemental Information with seemingly no Verify problems.

Bill

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, September 11, 2012 7:45 PM  
To: Rodgers, William (EEO)  
Subject: Re: VW Group - Confirmatory test decision information for VID DFUB-Q5A

Bill, I was looking over the running change Certificate request on Test Group DADXJ02.0FUB and noticed it wasn't a conditional. Since its a running change on a conditional certificate I think it has to be a conditional too.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>  
Date: 09/05/2012 10:47 AM  
Subject: VW Group - Confirmatory test decision information for VID DFUB-Q5A

Hello Jim,  
Just a heads up that we submitted E85 exhaust tests and Decision Information for the VID: DFUB-Q5A (Audi Q5 2.0L FFV). A running change to add this vehicle as the new EDV for this test group is forthcoming. Please let us know as soon as possible if you intent to confirm these tests.

PS - We will be submitting additional Audi Q5 3.0L stop-start test data, including Evap. tests, for another test group in the next day. You had



expressed interest in confirming the Evap. tests and scheduling it with the recently selected Evap. tests for VID: DFUB-BAQ (Audi A5 Cabriolet).

Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219

**To:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 9/12/2012 8:31:25 PM  
**Subject:** RE: Audi Meeting with EPA - Proposal

Len, I confirmed with Linc that we (our division) don't want to discuss Tier 3 topics. You need to take that up with the rulemaking guys in the ASD division. Mike Olechiw is the guy to call at 214-4297. Can you elaborate on the FFV usage and Label Calculation? I may need to bring Rob French and Bob Peavyhouse in depending on what they want to talk about.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 09/12/2012 01:05 PM  
**Subject:** RE: Audi Meeting with EPA - Proposal

Hello Jim:

I will let my Audi colleagues know about the time limit. Otherwise I will wait to hear which date works best for you.

Thanks,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**From:** Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
**Sent:** Wednesday, September 12, 2012 11:38 AM  
**To:** Kata, Leonard (EEO)

Subject: Re: Audi Meeting with EPA - Proposal

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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rech, Lothar (I/EA-523)" <Lothar.Rech@AUDI.DE>, "Rist, Domenic (I/EA-523)" <Domenic.Rist@audi.de>, "Schmidt, Oliver (EEO)" <Oliver.Schmidt@vw.com>  
Date: 09/11/2012 04:27 PM  
Subject: Audi Meeting with EPA - Proposal

Hello Jim:

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- Tier 3 Credit Calculation
- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
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Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

---

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Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Schlueter, Hannah (EASZ/1)"  
**Sent:** Wed 9/12/2012 8:48:05 PM  
**Subject:** Zugesagt: FW: Invitation: Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles (Sep 20 01:00 PM EDT in AA-N62-ASD&CD/AA-OTAQ-OFFICE@EPA)  
[winmail.dat](#)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 9/13/2012 11:02:03 AM  
**Subject:** VW Group - A5 Cabriolet Evap Test Schedule

Jim,

It appears, after fighting Verify all day yesterday, that I was successful in getting the Supplemental Information processed and corrected the delivery date in the Decision Information for the Audi Cabriolet Evap. test to be scheduled on Oct 31st, VID: DFUB-BAQ.

Please confirm that you have all that is necessary to schedule the test.

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Verify Help Desk [verifyhelp@csc.com]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Thur 9/13/2012 11:33:09 AM  
**Subject:** Verify test processing error  
[here](#)

I am unable to process the following test data batch file in Verify since Monday. I can open it in Verify and view the first test just fine, but the error appears once I try to submit the batch. The necessary Vehicle Information for VID: DUG-DAQ configuration 0 and 1 and Fuel Properties was submitted successfully.

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

There was an unexpected error processing your submission. Please retry your submission at a later date. If you continue to receive this message please contact the Verify Helpdesk. It can be reached through email ([verifyhelp@csc.com](mailto:verifyhelp@csc.com)) or by phone (1-888-890-1995 and choose option 4 ).

The rejection occurred at Thu Sep 13 07:23:43 EDT 2012 while processing document: \_f8f1e029-0479-4de2-b079-b2f8a8fe322e

Transaction Identifier: \_f8f1e029-0479-4de2-b079-b2f8a8fe322e

[Click here](#) to view the status history.

Thank you for submitting your request to Verify via CDX.



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 9/13/2012 12:29:26 PM  
**Subject:** VW Group - Bentley Application Submitted DBEXV06.04UC

Hello Jim,

I have submitted the application for new Bentley test group DBEXV06.04UC, which is for the continental GT/GTC carlines. This new test group is a carry-over (across) from currently certified test group DBEXV06.0501, which has the same evaporative family.

The changes for this new test group consist of an 8 speed transmission and a new engine controller.

Note – I have submitted both the applications and the certificate request, but have not received confirmation from VERIFY – please advise if you do not have either of these soon. As we discussed yesterday, timing is tight for us on this so as always we would appreciate your quick response.

Regards

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/13/2012 12:43:14 PM  
**Subject:** Re: VW Group - Bentley Application Submitted DBEXV06.04UC

Hasn't shown up yet.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 09/13/2012 08:29 AM  
Subject: VW Group - Bentley Application Submitted DBEXV06.04UC

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Regards  
Mike  
Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 9/13/2012 1:15:00 PM  
**Subject:** RE: VW Group - Bentley Application Submitted DBEXV06.04UC  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hi Jim,

I see that the pdf's were finally accepted. I am hoping that the cert request report comes back soon.

From: Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, September 13, 2012 8:43 AM  
To: Giles, Michael (EEO)  
Subject: Re: VW Group - Bentley Application Submitted DBEXV06.04UC

Hasn't shown up yet.

Jim Snyder  
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Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
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FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 9/13/2012 2:36:31 PM  
**Subject:** RE: VW Group - Bentley Application Submitted DBEXV06.04UC  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

I now have a report that the certificate request was accepted.

From: Giles, Michael (EEO)  
Sent: Thursday, September 13, 2012 9:15 AM  
To: 'Jim Snyder'  
Subject: RE: VW Group - Bentley Application Submitted DBEXV06.04UC

Hi Jim,

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From: Jim Snyder [<mailto:Snyder.Jim@epamail.epa.gov>]  
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Subject: Re: VW Group - Bentley Application Submitted DBEXV06.04UC

Hasn't shown up yet.

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Light-Duty Vehicle Group  
Compliance Division  
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(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>  
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Subject: VW Group - Bentley Application Submitted DBEXV06.04UC

Hello Jim,

I have submitted the application for new Bentley test group DBEXV06.04UC, which is for the continental GT/GTC carlines. This new test group is a carry-over (across) from currently certified test group DBEXV06.0501, which has the same evaporative family.

The changes for this new test group consist of an 8 speed transmission and a new engine controller.

Note – I have submitted both the applications and the certificate request, but have not received confirmation from VERIFY – please advise if you do not have either of these soon. As we discussed yesterday, timing is tight for us on this so as always we would appreciate your quick response.

Regards  
Mike  
Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/13/2012 11:15:37 PM  
**Subject:** RE: VW Group - Bentley Application Submitted DBEXV06.04UC  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:Snyder.Jim@epamail.epa.gov)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

The cert request is in verify. I glanced at it and found that the fee payment hasn't shown up yet. Shows VW sent it 8/31.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 09/13/2012 10:36 AM  
**Subject:** RE: VW Group - Bentley Application Submitted DBEXV06.04UC

I now have a report that the certificate request was accepted.

**From:** Giles, Michael (EEO)  
**Sent:** Thursday, September 13, 2012 9:15 AM  
**To:** 'Jim Snyder'  
**Subject:** RE: VW Group - Bentley Application Submitted DBEXV06.04UC

Hi Jim,

I see that the pdf's were finally accepted. I am hoping that the cert request report comes back soon.

**From:** Jim Snyder [mailto:Snyder.Jim@epamail.epa.gov]  
**Sent:** Thursday, September 13, 2012 8:43 AM  
**To:** Giles, Michael (EEO)  
**Subject:** Re: VW Group - Bentley Application Submitted DBEXV06.04UC

Hasn't shown up yet.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946

snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 09/13/2012 08:29 AM  
Subject: VW Group - Bentley Application Submitted DBEXV06.04UC

Hello Jim,

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3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 9/14/2012 11:39:42 AM  
**Subject:** RE: VW Group - Bentley Application Submitted DBEXV06.04UC  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[\[mailto:Snyder.Jim@epamail.epa.gov\]](mailto:[mailto:Snyder.Jim@epamail.epa.gov])  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Jim,

I have a note that fee payment was made electronically today. Please let us know if you have confirmation to proceed.

Thanks,

Mike

From: Jim Snyder [<mailto:Snyder.Jim@epamail.epa.gov>]  
Sent: Thursday, September 13, 2012 7:16 PM  
To: Giles, Michael (EEO)  
Subject: RE: VW Group - Bentley Application Submitted DBEXV06.04UC

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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 09/13/2012 10:36 AM  
Subject: RE: VW Group - Bentley Application Submitted DBEXV06.04UC

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To: Giles, Michael (EEO)  
Subject: Re: VW Group - Bentley Application Submitted DBEXV06.04UC

Hasn't shown up yet.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 09/13/2012 08:29 AM  
Subject: VW Group - Bentley Application Submitted DBEXV06.04UC

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Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** CN=Byron Bunker/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** []  
**From:** CN=Linc Wehrly/OU=AA/O=USEPA/C=US  
**Sent:** Fri 9/14/2012 11:48:40 AM  
**Subject:** Fw: Establishment of the Global Environmental Compliance Network  
[morrie.kirshenblatt@ec.gc.ca](mailto:morrie.kirshenblatt@ec.gc.ca)  
[www.ec.gc.ca](http://www.ec.gc.ca)  
<http://www2.unece.org/wiki/display/trans/EWG+1st+session>  
[wehrly.linc@epa.gov](mailto:wehrly.linc@epa.gov)  
[morrie.kirshenblatt@ec.gc.ca](mailto:morrie.kirshenblatt@ec.gc.ca)

Byron,

Do you have any thoughts on this? In concept, this seems like a fine idea. However, I'm not sure how comfortable we are discussing compliance issues broadly or in a time frame that may be acceptable to others. I'm supposed to talk to Morrie at 10 am today to give him my initial feedback.

Thanks,  
Linc

Linc Wehrly  
Director, Light-Duty Vehicle Center  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4286  
[wehrly.linc@epa.gov](mailto:wehrly.linc@epa.gov)  
----- Forwarded by Linc Wehrly/AA/USEPA/US on 09/14/2012 07:45 AM -----

From: "Kirshenblatt,Morrie [NCR]" <[Morrie.Kirshenblatt@ec.gc.ca](mailto:Morrie.Kirshenblatt@ec.gc.ca)>  
To: Linc Wehrly/AA/USEPA/US@EPA  
Date: 09/11/2012 04:07 PM  
Subject: RE: Establishment of the Global Environmental Compliance Network

Hi Linc,  
This went out last Friday under Karl and Steve's signature. I wanted to bring you into loop as you are the EPA contact on this.

So far received one response here. My plan is to begin acknowledging them and I will cc you. We will build a database that I can share with you. Was wondering whether you wanted to discuss further in terms of expectations or approach on this.

Regards  
Morrie

Morrie Kirshenblatt P.Eng.  
Chef | Chief  
Section de l'administration réglementaire | Regulatory Administration Section  
Division des transports | Transportation Division  
Environnement Canada | Environment Canada

351 St. Joseph Blvd | 351, boul. St-Joseph

Gatineau (Québec) K1A 0H3 | Gatineau (Quebec) K1A 0H3

morrie.kirshenblatt@ec.gc.ca

Téléphone | Telephone 819-956-6995

Télécopieur | Facsimile 819-953-7815

Gouvernement du Canada | Government of Canada

Site Web | Website [www.ec.gc.ca](http://www.ec.gc.ca)

From: Daoust, Jessica [NCR] On Behalf Of McCauley, Steve [NCR]

Sent: September 7, 2012 2:58 PM

To: 'wolfgang.wister@tb-wister.com'; 'michel.loccufier@mobilite.fgov.be'; 'bborojevic@eib-cmv.com'; 'islaveikov@rta.government.bg'; 'a\_atanassova@aebtri.com'; 'cilieva@rta.government.bg'; 'merz.rustom@tc.gc.ca'; 'dan.davis@tc.gc.ca'; 'jan.skriwanek@mcdcr.cz'; 'bjorn.ziessler@trafi.fi'; 'daniel.kopaczewski@developpement-durable.gouv.fr'; 'bernard.gauvin@numericable.fr'; 'jean'; 'christoph.albus@bmvbs.bund.de'; 'ref'; 'frank.wrobel@kba.de'; 'deak.janos@kti.hu'; 'mmatolcsy@gmail.com'; 'antonio.erario@mit.gov.it'; 'janis.liepins@csdd.gov.lv'; 'jerzy.kownacki@its.waw.pl'; 'claudeliesch@snch.lu'; 'cdoornheim@rdw.nl'; 'hjongenelen@rdw.nl'; 'espena@vegvesen.no'; 'marius.damachi@rarom.ro'; 'kisulenko@satrfond.ru'; '3646026@mail.ru'; 'komarov@niiat.ru'; 'vakutennev@nami.ru'; 'zazhigalkin@mail.ru'; 'vladan.popovic@gmail.com'; 'marek.hudec@mindop.sk'; 'juraj.porazik@slovdekra.sk'; 'jimprietob@mityc.es'; 'heinz.berger@certiconsult.ch'; 'emre.dabak@sanayi.gov.tr'; 'fatih.ozcinar@sanayi.gov.tr'; 'eu@mtu.gov.ua'; 'astolyarov@insat.org.ua'; 'mobility08@mail.ru'; 'ian.yarnold@dft.gsi.gov.uk'; 'christopher.bonanti@dot.gov'; 'delaney.maureen@epa.gov'; 'robert.hogan@infrastructure.gov.au'; 'thomas.belcher@infrastructure.gov.au'; 'ibeltran@mincomercio.gov.co'; 'Santiago.schlesinger@ptp.com.co'; 'nr.gokarn@nic.in'; 'urduhwarehe.apx@araiindia.com'; 'gopalantr@rediffmail.com'; 'vishnu.mathur@siam.in'; 'dg@siam.in'; 'Ambujsharma@hotmail.com'; 'onoda'; 'bessho@mail.nissan.co.jp'; 'matsuo'; 'mori@jasic.org'; 'ryuzo@oshita.tec.toyota.co.jp'; 'sakai@jasic.org'; 'sato'; 'ueno@jasic.org'; 'yhjjang@korea.kr'; 'hyoung35@ts2020.kr'; 'jskim'; 'jwlee@ts2020.kr'; 'Sonys3559@korea.kr'; 'dg@miros.gov.my'; 'siva@mot.gov.my'; 'fauziana@miros.gov.my'; 'solah@jpp.gov.my'; 'sharulnizam@jpp.gov.my'; 'l.mortimer@transport.govt.nz'; 'morgansj@nrccs.org.za'; 'chuckrit\_tan@dlt.go.th'; 'carlo.pettinelli@ec.europa.eu'; 'philippe.jean@ec.europa.eu'

Cc: Kirshenblatt, Morrie [NCR]; Simon.Karl@epamail.epa.gov; wehrly.linc@epa.gov;

Juan.Ramos.Garcia@unece.org

Subject: Establishment of the Global Environmental Compliance Network

Sent on behalf of Steve McCauley

Sir / Madame:

I am writing to you in regard to the joint proposal that Canada and the United States of America tabled at the Enforcement Working Group Meeting on June 28, 2012 which was accepted and in which we proposed to establish of an informal network of contacts to discuss compliance issues related to environmental regulations (re: EFWG-01-02). The document is available on the UNECE web site at <http://www2.unece.org/wiki/display/trans/EWG+1st+session> and is attached for your information.

At the meeting the participants agreed to establish an informal network of Contracting Parties to facilitate the exchange of compliance information related to environmental regulations on a voluntary and informal basis. As noted in the Informal Document, the nature and scope of the information to be exchanged is solely at the discretion of individual participants.

The Global Environmental Compliance Network will be a timely forum for government officials to exchange information on compliance issues. As outlined in the informal document the Network will:

1. Serve as a quick notify mechanism in the event of compliance/enforcement (C/E) actions that may have international impacts;
2. Provide that the same server list can be used to share general concerns about areas of concern, share information on best practices and notify Contracting Parties of any changing requirements;
3. Serve as a quick reference contact list to facilitate any need for bilateral discussions regarding C/E issues. In this case a Contracting Party can feel free to contact another Contracting Party regarding a particular matter.

At this time we would like to establish the contact list. We wish to request that if you are interested in being part of the Global Environmental Compliance Network, please identify members of your government that would be appropriate to participate in such a network so that they can be added to the Network contact list. Participants should be government officials that are directly involved in compliance and enforcement activities related to environmental regulations. Both Canada and the U.S. will actively maintain the Network list. Mr. Linc Wehrly (wehrly.linc@epa.gov) will serve as the coordinator for the US EPA and Mr. Morrie Kirshenblatt will serve as the coordinator for Environment Canada.

Please, send your contact information to morrie.kirshenblatt@ec.gc.ca, including; country, organization name, individual's name and title along with their email address, mail address and phone contact information. Our plan is to send to all interested parties the Network list of confirmed contacts before the next WP.29 meeting scheduled for November, 2012.

Should you have any questions related to this initiative, please do not hesitate to contact us at any time.

Thank you for your consideration,

Karl Simon  
Director, Transportation and Climate Division  
Office of Transportation and Air Quality  
U.S. Environmental Protection Agency

Steve McCauley  
Director General, Energy and Transportation Directorate  
Environment Canada

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Fri 9/14/2012 2:42:05 PM  
**Subject:** FW: Confirmation of Certification Fees Payment Bentley

For your information.

-----Original Message-----

From: fees@epa.gov [mailto:fees@epa.gov]  
Sent: Friday, September 14, 2012 10:22 AM  
To: Thomas, Richard (EEO)  
Subject: Confirmation of Certification Fees Payment

To the representative for Bentley Motors Ltd.:

Your certification Fee Filing Form(s) submitted for the following family or test group(s) and the associated financial documentation for your payment of \$32678.00 were received on 09/14/2012.

- DBEXV06.04UC

This message indicates only that EPA has received record of your payment and form(s) for the above certification fee. It does not constitute the granting of a Certificate of Conformity by EPA or convey any information about the status of your certification application for the subject family or test group(s).

Please do not respond to this email. If you have any questions regarding certification of the family or test group(s), please contact your EPA Certification Representative; for questions on fees, contact Fees@epa.gov.

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Fri 9/14/2012 6:02:28 PM  
**Subject:** VW Group - Decision Information Audi A8/A8L TDI Stop-Start

Hi Jim,

Just a heads up, I was finally able to submit the tests and Decision Information related to the Audi A8/A8L TDI with Stop-Start we discussed.

Let me know if you are still interested in testing this vehicle.

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)



**To:** richard.thomas@vw.com[]  
**Cc:** leonard.kata@vw.com;oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Aaron Hula/OU=AA/O=USEPA/C=US@EPA[]; liver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Aaron Hula/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Aaron Hula/OU=AA/O=USEPA/C=US@EPA[]; N=Aaron Hula/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Fri 9/14/2012 9:21:01 PM  
**Subject:** re: Question about your 2011 CAFE report

Richard,

We are beginning our review of your 2011 CAFE report and data submittal. The EPA folks who publish the EPA CO2 & Fuel Economy Trends report have asked me why the following vehicles are included in your 2011 Truck CAFE Report (in Verify):

Tiguan (2WD)

As you know, beginning with 2011 CAFE reports, NHTSA regulations & policy requires 2WD SUVs equal to or less than 6000 lbs GVWR will be included in your passenger car CAFE, ref 74 FR 14419, March 30, 2009.

Please let us know as soon as you get a chance. We could use a quick response, if possible, as the 2012 FE Trends report is fast approaching their printing deadline.

Thanks

**To:** richard.thomas@vw.com[]  
**Cc:** leonard.kata@vw.com;oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Aaron Hula/OU=AA/O=USEPA/C=US@EPA[]; liver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Aaron Hula/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Aaron Hula/OU=AA/O=USEPA/C=US@EPA[]; N=Aaron Hula/OU=AA/O=USEPA/C=US@EPA[]  
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**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; im Snyder/AA/USEPA/US@EPA; Aaron Hula/AA/USEPA/US@EPA[]; aron Hula/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Mon 9/17/2012 1:58:23 PM  
**Subject:** RE: Question about your 2011 CAFE report  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)  
[\[mailto:Good.David@epamail.epa.gov\]](mailto:Good.David@epamail.epa.gov)

Hi Dave;

As we discussed on the phone today, the 2011 Volkswagen Tiguan (2WD) is classified as a truck under the section of 523.5 (a) (5) Permit expanded use of the automobile for cargo-carrying purposes or other nonpassenger-carrying purposes through:

(i) For non-passenger automobiles manufactured prior to model year 2012, the removal of seats by means installed for that purpose by the automobile's manufacturer or with simple tools, such as screwdrivers and wrenches, so as to create a flat, floor level, surface extending from the forward most point of installation of those seats to the rear of the automobile's interior; or.....

This vehicle has the capability to easily remove the second row of seats as it is described in the vehicle owner's manual.

Best regards,

Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Friday, September 14, 2012 5:21 PM  
To: Thomas, Richard (EEO)  
Cc: Kata, Leonard (EEO); Schmidt, Oliver (EEO); Jim Snyder; Aaron Hula

Subject: re: Question about your 2011 CAFE report

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**To:** CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; eonard.Kata@vw.com[]  
**Cc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 9/17/2012 2:57:34 PM  
**Subject:** Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles

Len there is a slight chance that I won't be back by thursday for this mtg but I will be in Friday. In case there is a change, Dave's number is 214-4467 and Len's number is 248-754-4204.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Wright.DavidA@epamail.epa.gov;Dalton.Joel@epamail.epa.gov;Leonard.Kata@vw.com[]; alton.Joel@epamail.epa.gov;Leonard.Kata@vw.com[]; eonard.Kata@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** Snyder.Jim@epamail.epa.gov  
**Sent:** Mon 9/17/2012 2:57:34 PM  
**Subject:** Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles

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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;Domenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
 Dalton/OU=AA/O=USEPA/C=US@EPA; [Ex. 7] CN=Linc  
 Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE; [Ex. 7] CN=R  
 oberts French/OU=AA/O=USEPA/C=US@EPA[]; omenic.Rist@audi.de;CN=Joel  
 Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
 Dalton/OU=AA/O=USEPA/C=US@EPA [Ex. 7] CN=Linc  
 Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE; [Ex. 7] CN=R  
 oberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Joel  
 Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
 Dalton/OU=AA/O=USEPA/C=US@EPA [Ex. 7] CN=Linc  
 Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE [Ex. 7] CN=R  
 oberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Joel  
 Dalton/OU=AA/O=USEPA/C=US@EPA; [Ex. 7] CN=Linc  
 Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE [Ex. 7] CN=R  
 oberts French/OU=AA/O=USEPA/C=US@EPA; [Ex. 7] CN=Linc  
 Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE; [Ex. 7] CN=R  
 oberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Linc  
 Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE; [Ex. 7] CN=R  
 oberts French/OU=AA/O=USEPA/C=US@EPA[];  
 othar.Rech@AUDI.DE; [Ex. 7]  
 French/OU=AA/O=USEPA/C=US@EPA[]; [Ex. 7] CN=Roberts  
 French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Tom  
 Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Tom  
 Anderson/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 9/17/2012 3:04:06 PM  
**Subject:** Audi Mtg w/ EPA rm 601C

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation
- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

[Ex. 7]

**Ex. 7**

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;Domenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; omenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; eonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; othar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; liver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]

**Cc:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]

**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US

**Sent:** Mon 9/17/2012 3:04:06 PM

**Subject:** Audi Mtg w/ EPA rm 601C

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation
- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

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Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification



**To:** Vincent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA;"Rodgers, William (EEO)"  
[William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 9/17/2012 4:09:58 PM  
**Subject:** VW testing schedule

Hello Vincent,

To follow up from my voice message – would you be able to send a schedule for the testing for our Jetta Hybrid and Beetle TDI? We would like to have 2 or 3 staff there for the start of testing if possible.

Also, we have a new colleague here from Germany, and we would like to request a small tour of your facility (maybe after one of the tests if this works for you).

Please let me know or feel free to call me if you wish to discuss.

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Mon 9/17/2012 4:19:11 PM  
**Subject:** Declined: RE: Audi Meeting with EPA

**To:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Mon 9/17/2012 4:52:26 PM  
**Subject:** RE: Question about your 2011 CAFE report [Thanks] NNTO  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)  
[\[mailto:Good.David@epamail.epa.gov\]](mailto:Good.David@epamail.epa.gov)

From: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
To: David Good/AA/USEPA/US@EPA  
Cc: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>, "Schmidt, Oliver (EEO)" <Oliver.Schmidt@vw.com>, Jim Snyder/AA/USEPA/US@EPA, Aaron Hula/AA/USEPA/US@EPA  
Date: 09/17/2012 09:58 AM  
Subject: RE: Question about your 2011 CAFE report

Hi Dave;

As we discussed on the phone today, the 2011 Volkswagen Tiguan (2WD) is classified as a truck under the section of 523.5 (a) (5) Permit expanded use of the automobile for cargo-carrying purposes or other nonpassenger-carrying purposes through:

(i) For non-passenger automobiles manufactured prior to model year 2012, the removal of seats by means installed for that purpose by the automobile's manufacturer or with simple tools, such as screwdrivers and wrenches, so as to create a flat, floor level, surface extending from the forward most point of installation of those seats to the rear of the automobile's interior; or.....

This vehicle has the capability to easily remove the second row of seats as it is described in the vehicle owner's manual.

Best regards,  
Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

From: David Good [mailto:Good.David@epamail.epa.gov]  
Sent: Friday, September 14, 2012 5:21 PM  
To: Thomas, Richard (EEO)  
Cc: Kata, Leonard (EEO); Schmidt, Oliver (EEO); Jim Snyder; Aaron Hula  
Subject: re: Question about your 2011 CAFE report  
Richard,

We are beginning our review of your 2011 CAFE report and data submittal. The EPA folks who publish the EPA CO2 & Fuel Economy Trends report have asked me why the following vehicles are included in your 2011 Truck CAFE Report (in Verify):

Tiguan (2WD)

As you know, beginning with 2011 CAFE reports, NHTSA regulations & policy requires 2WD SUVs equal to or less than 6000 lbs GVWR will be included in your passenger car CAFE, ref 74 FR 14419, March 30, 2009.

Please let us know as soon as you get a chance. We could use a quick response, if possible, as the 2012 FE Trends report is fast approaching their printing deadline.

Thanks

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Mon 9/17/2012 7:28:44 PM  
**Subject:** 2013 FE Guide - Verify data attached  
VW Group 2013 FE Guide-all rel dates-no-sales-9-17-2012.xlsx

Richard,

Here's the data as of about 2PM today. The Q5 labels seemed OK to me.

Let me know if you see any errors that need correction.

EPA com	VERIFY cc	Model Yr (Mfr Name	Division (C	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013 Audi	Audi	A3	ADX	59	2.0 4
Diesel;		2013 Audi	Audi	A3	ADX	73	2.0 4
		2013 Audi	Audi	A3	ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013 Audi	Audi	A4	ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	102	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	39	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	104	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	103	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013 Audi	Audi	A6	ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled: Y		2013 Audi	Audi	A8	ADX	128	3.0 6
		2013 Audi	Audi	A8	ADX	98	4.0 8
Relabeled: Y		2013 Audi	Audi	A8L	ADX	129	3.0 6
		2013 Audi	Audi	A8L	ADX	97	4.0 8
		2013 Audi	Audi	A8L	ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013 Audi	Audi	allroad quattro	ADX	101	2.0 4
		2013 Audi	Audi	Q5	ADX	91	2.0 4
		2013 Audi	Audi	Q5	ADX	105	2.0 4
Hybrid;		2013 Audi	Audi	Q5 Hybrid	ADX	95	2.0 4
		2013 Audi	Audi	Q7	ADX	61	3.0 6
Diesel;		2013 Audi	Audi	Q7	ADX	53	3.0 6
		2013 Audi	Audi	RS5	ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
		2013 Audi	Audi	S4	ADX	42	3.0 6
		2013 Audi	Audi	S4	ADX	45	3.0 6
		2013 Audi	Audi	S5	ADX	43	3.0 6
		2013 Audi	Audi	S5	ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013 Audi	Audi	S6	ADX	48	4.0 8
		2013 Audi	Audi	S7	ADX	47	4.0 8
		2013 Audi	Audi	S8	ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe	ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013 Audi	Audi	TTRS Coupe	ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental BEYing Spur	110	6.0 12	
		2013 Bentley	Bentley Motors	Continental BEY	108	4.0 8	
		2013 Bentley	Bentley Motors	Continental BEY	113	6.0 12	
		2013 Bentley	Bentley Motors	Continental BEYC	107	4.0 8	
		2013 Bentley	Bentley Motors	Continental BEYC	111	6.0 12	
		2013 Bentley	Bentley Motors	Continental BEYpersports Cont	112	6.0 12	
		2013 Bentley	Bentley Motors	Mulsanne BEY	96	6.8 8	

	2013	Bugatti	Bugatti	Veyron	BGT	88	8.0	16
	2013	Lamborghini	Lamborghini	Aventador	Coupe	92	6.5	12
	2013	Lamborghini	Lamborghini	Aventador	Roadster	93	6.5	12
	2013	Lamborghini	Lamborghini	Gallardo	Coupe	30	5.2	10
Error - saleY	2013	Lamborghini	Lamborghini	Gallardo	CN LX	32	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo	Spyder	31	5.2	10
Error - saleY	2013	Lamborghini	Lamborghini	Gallardo	SN LX	33	5.2	10
Diesel;	2013	Volkswagen	Volkswagen	BEETLE	VWX	94	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE	VWX	19	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE	VWX	84	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE	VWX	89	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE	VWX	17	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE	VWX	27	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	CONVERTIBLE	20	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	CONVERTIBLE	85	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	CONVERTIBLE	90	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	CONVERTIBLE	18	2.5	5
	2013	Volkswagen	Volkswagen	6C	VWX	1	2.0	4
	2013	Volkswagen	Volkswagen	6C	VWX	4	2.0	4
	2013	Volkswagen	Volkswagen	6C	VWX	2	3.6	6
	2013	Volkswagen	Volkswagen	6C 4MOTION	VWX	3	3.6	6
	2013	Volkswagen	Volkswagen	EOS	VWX	21	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF	VWX	72	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF	VWX	81	2.0	4
	2013	Volkswagen	Volkswagen	GOLF	VWX	16	2.5	5
	2013	Volkswagen	Volkswagen	GOLF	VWX	26	2.5	5
	2013	Volkswagen	Volkswagen	Golf R	VWX	57	2.0	4
	2013	Volkswagen	Volkswagen	GTI	VWX	22	2.0	4
	2013	Volkswagen	Volkswagen	GTI	VWX	23	2.0	4
	2013	Volkswagen	Volkswagen	Jetta	VWX	50	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta	VWX	71	2.0	4
	2013	Volkswagen	Volkswagen	Jetta	VWX	86	2.0	4
	2013	Volkswagen	Volkswagen	Jetta	VWX	87	2.0	4
	2013	Volkswagen	Volkswagen	Jetta	VWX	51	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta	VWX	80	2.0	4
	2013	Volkswagen	Volkswagen	Jetta	VWX	15	2.5	5
	2013	Volkswagen	Volkswagen	Jetta	VWX	25	2.5	5
Hybrid;	2013	Volkswagen	Volkswagen	Jetta Hybrid	VWX	100	1.4	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT	VWAGEN	74	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT	VWAGEN	79	2.0	4
	2013	Volkswagen	Volkswagen	JETTA SPORT	VWAGEN	14	2.5	5
	2013	Volkswagen	Volkswagen	JETTA SPORT	VWAGEN	24	2.5	5
Diesel;	2013	Volkswagen	Volkswagen	Passat	VWX	62	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Passat	VWX	64	2.0	4
	2013	Volkswagen	Volkswagen	Passat	VWX	83	2.5	5
	2013	Volkswagen	Volkswagen	Passat	VWX	82	2.5	5
	2013	Volkswagen	Volkswagen	Passat	VWX	63	3.6	6
	2013	Volkswagen	Volkswagen	TIGUAN	VWX	68	2.0	4
	2013	Volkswagen	Volkswagen	TIGUAN	VWX	56	2.0	4
	2013	Volkswagen	Volkswagen	TIGUAN 4MOTION	VWX	55	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Touareg	VWX	54	3.0	6
	2013	Volkswagen	Volkswagen	Touareg	VWX	78	3.6	6
Hybrid;	2013	Volkswagen	Volkswagen	Touareg Hybrid	VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S6)	21	28	24				26.6	38.2	30.8102
Auto(AM-S	30	42	34				39.0935	59.3437	46.1856
Manual(M	21	30	24				25.3	40.3	30.3902
Auto(AM-S6)	21	28	24				27.2	37.1	30.9119
Auto(AV-S8)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-Si	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21	ded), 600.314-08 states label values must not change for entire model year, except for 600-507(a) and 600-314-08(					
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8)	18	28	21	ded), 600.314-08 states label values must not change for entire model year, except for 600-507(a) and 600-314-08(					
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	24	30	26				30.4	39.9	34.048
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S7)	16	23	18				19.1	30	22.8332
Auto(AM-S7)	16	22	18				19.2	28.9	22.6159
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	26	21				22.1	34.7	26.4165
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Manual(M6)	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	11	18	13				12.9	21.8	15.8033



Auto(AM-S7)	8	15	10	10	17.9	12.4782
Auto(AM-S7)	11	18	13	12.6	25.2	16.2581
Auto(AM-S7)	10	16	12	11.5	21.2	14.4817
Auto(AM-S6)	13	20	16	16.1	25.4	19.276
re not offered for sale in the US. Please revise Verify as needed.	12	20	15	14	24	17.2308
Manual(M6)	12	20	14	16	25.4	19.197
Auto(AM-S6)	13	20	16	13	22.6	16.0722
re not offered for sale in the US. Please revise Verify as needed.	29	39	32	37.3	55.3	43.7011
Manual(M6)	22	30	25	26.5	42.0656	31.7942
Auto(AM-S6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M5)	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S6)	21	29	24	26.8	40.2092	31.532
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S6)	22	31	25	26.977	42.4936	32.2814
Manual(M6)	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S6)	22	30	25	27.5	41.5	32.4219
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Manual(M6)	19	27	22	23.9	37.1	28.456
Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229
Manual(M6)	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M5)	24	34	28	28.8	46.2	34.6771
Manual(M6)	22	33	26	26.5556	44.9945	32.56
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S7)	42	49	45	57.2	66.2	60.9274
Auto(AM-S6)	29	39	33	37.6	56.2	44.1798
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	30	40	34	37.9	56.8	44.5744
Manual(M6)	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M5)	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S6)	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Model	Year	Comb	Unr	Guzzler?	Air Aspir	I Air Aspir	A Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286				TC		Turbocharged	AMS	Automated Manual- Selectable	(e.g. Au
29.8946	41.5209	34.2046				TC		Turbocharged	AMS	Automated	6
20.8146	29.9953	24.1394				TC		Turbocharged	M	Manual	6
20.891	28.1035	23.6187				TC		Turbocharged	AMS	Automated Manual- Selectable	(e.g. Au
23.6355	30.6684	26.3554				TC		Turbocharged	SA	Selectable Continuously Variable	(e.g. C
20.3576	29.8271	23.7508				TC		Turbocharged	SA	Semi-Automatic	8
20.402	28.949	23.5279				TC		Turbocharged	SA	Semi-Automatic	8
22.2425	32.0861	25.8049				TC		Turbocharged	M	Manual	6
23.6355	30.6684	26.3554				TC		Turbocharged	SCV	Selectable	8
20.3576	29.8271	23.7508				TC		Turbocharged	SA	Semi-Auto	8
20.402	28.949	23.5279				TC		Turbocharged	SA	Semi-Auto	8
20.3576	29.8271	23.7508				TC		Turbocharged	SA	Semi-Automatic	8
20.402	28.949	23.5279				TC		Turbocharged	SA	Semi-Automatic	8
22.2425	32.0861	25.8049				TC		Turbocharged	M	Manual	6
24.5044	32.5529	27.5721				TC		Turbocharged	SA	Selectable Continuously Variable	(e.g. C
20.3576	29.8271	23.7508				TC		Turbocharged	SA	Semi-Automatic	8
18.3949	27.2332	21.5408				SC		Supercharged	SA	Semi-Automatic	8
17.8058	27.5484	21.1758				SC		Supercharged	SA	Semi-Automatic	8
e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in combined unr	17.8058	27.5484	21.1758			SC		Supercharged	SA	Semi-Auto	8
17.2616	28.4347	20.9695				TC		Turbocharged	SA	Semi-Auto	8
e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in combined unr	17.8058	27.5484	21.1758			SC		Supercharged	SA	Semi-Auto	8
16.0273	25.8053	19.3219				TC		Turbocharged	SA	Semi-Automatic	8
13.1387	20.6025	15.6978	G			NA		Naturally Aspirated		Semi-Automatic	8
19.9584	26.6824	22.5112				TC		Turbocharged	SA	Semi-Automatic	8
19.9584	26.6824	22.5112				TC		Turbocharged	SA	Semi-Automatic	8
19.7289	28.2351	22.823				TC		Turbocharged	SA	Semi-Automatic	8
19.6619	27.5771	22.5781				TC		Turbocharged	SA	Semi-Automatic	8
24.0075	29.7936	26.3065				TC		Turbocharged	SA	Semi-Automatic	8
15.522	21.5458	17.7559				SC		Supercharged	SA	Semi-Automatic	8
18.74	27.62	21.9099				TC		Turbocharged	SA	Semi-Automatic	8
15.7409	23.3075	18.4339				NA		Naturally Aspirated	AMS	Automated Manual- Selectable	(e.g. Au
15.8793	22.1836	18.2078				NA		Naturally Aspirated	AMS	Automated Manual- Selectable	(e.g. Au
18.117	27.558	21.419				SC		Supercharged	AMS	Automated Manual- Selectable	(e.g. Au
17.0438	26.023	20.1767				SC		Supercharged	AMS	Manual	6
18.117	27.558	21.419				SC		Supercharged	AMS	Automated Manual- Selectable	(e.g. Au
17.0438	26.023	20.1767				SC		Supercharged	AMS	Manual	6
17.6699	25.953	20.6333				SC		Supercharged	AMS	Automated Manual- Selectable	(e.g. Au
16.761	26.9697	20.2022				TC		Turbocharged	AMS	Automated Manual- Selectable	(e.g. Au
16.761	26.9697	20.2022				TC		Turbocharged	AMS	Automated Manual- Selectable	(e.g. Au
15.2801	25.5632	18.6574				TC		Turbocharged	SA	Semi-Automatic	8
22.407	31.1674	25.6515				TC		Turbocharged	AMS	Automated Manual- Selectable	(e.g. Au
22.407	31.1674	25.6515				TC		Turbocharged	AMS	Automated Manual- Selectable	(e.g. Au
17.751	25.2021	20.4751				TC		Turbocharged	AMS	Manual	6
11.2476	18.7327	13.7134	G			TC		Turbocharged	SA	Semi-Automatic	6
15.0109	24.4645	18.1706				TC		Turbocharged	SA	Semi-Automatic	8
11.5043	18.877	13.9574	G			TC		Turbocharged	SA	Semi-Automatic	6
14.0639	23.9773	17.2766	G			TC		Turbocharged	SA	Semi-Automatic	8
11.2476	18.7327	13.7134	G			TC		Turbocharged	SA	Semi-Automatic	6
11.5043	18.877	13.9574	G			TC		Turbocharged	SA	Semi-Automatic	6
10.5402	17.7129	12.8889	G			TC		Turbocharged	SA	Semi-Automatic	8

8.4232	14.7698	10.4424	G	TC	Turbocharged	AMS	Automated Manual- Selectable	7	e.g. Au
10.6055	18.4729	13.1199	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable	7	e.g. Au
9.7957	16.2453	11.9264	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable	7	e.g. Au
13.4655	19.7573	15.718	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable	6	e.g. Au
12.0883	19.9831	14.7021	G	NA	Naturally Aspirated	AMS	Manual	6	
13.3954	19.7741	15.6701	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable	6	e.g. Au
11.5388	19.5451	14.1465	G	NA	Naturally Aspirated	AMS	Manual	6	
28.6469	38.87	32.4925		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
22.0202	29.5574	24.8746		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	AMS	Manual	6	
20.5408	29.7034	23.8517		TC	Turbocharged	AMS	Manual	6	
22.2864	28.5683	24.7338		NA	Naturally Aspirated	AMS	Semi-Automatic	6	
21.7201	30.6767	25.0054		NA	Naturally Aspirated	AMS	Manual	5	
21.1383	28.6751	23.9738		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	AMS	Manual	6	
20.5408	29.7034	23.8517		TC	Turbocharged	AMS	Manual	6	
21.2302	26.9749	23.4804		NA	Naturally Aspirated	AMS	Semi-Automatic	6	
21.8706	31.0367	25.2227		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
20.8232	31.7255	24.6324		TC	Turbocharged	AMS	Manual	6	
17.4935	26.5716	20.6716		NA	Naturally Aspirated	AMS	Semi-Automatic	6	
16.9415	25.219	19.8774		NA	Naturally Aspirated	AMS	Semi-Automatic	6	
21.7634	30.1121	24.8658		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	AMS	Manual	6	
23.6446	31.0458	26.486		NA	Naturally Aspirated	AMS	Semi-Automatic	6	
22.7343	32.7402	26.3594		NA	Naturally Aspirated	AMS	Manual	5	
19.278	26.8882	22.0917		TC	Turbocharged	AMS	Manual	6	
24.2237	32.5108	27.3624		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
21.2839	30.8324	24.7304		TC	Turbocharged	AMS	Manual	6	
23.7854	31.6043	26.7652		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
23.1009	29.1554	25.4822		NA	Naturally Aspirated	AMS	Semi-Automatic	6	
24.3944	33.6309	27.8344		NA	Naturally Aspirated	AMS	Manual	5	
21.8931	32.6043	25.6912		TC	Turbocharged	AMS	Manual	6	
29.6183	41.8508	34.104		TC	Turbocharged	AMS	Manual	6	
23.6446	31.0458	26.486		NA	Naturally Aspirated	AMS	Semi-Automatic	6	
22.7343	32.7402	26.3594		NA	Naturally Aspirated	AMS	Manual	5	
41.6792	48.86	44.6309		TC	Turbocharged	AMS	Automated Manual- Selectable	7	e.g. Au
28.8556	39.4682	32.8278		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	AMS	Manual	6	
23.6446	31.0458	26.486		NA	Naturally Aspirated	AMS	Semi-Automatic	6	
22.7343	32.7402	26.3594		NA	Naturally Aspirated	AMS	Manual	5	
30.4633	40.2057	34.1916		TC	Turbocharged	AMS	Automated Manual- Selectable	6	e.g. Au
30.8024	42.6219	35.1943		TC	Turbocharged	AMS	Manual	6	
22.1078	30.6611	25.2814		NA	Naturally Aspirated	AMS	Semi-Automatic	6	
21.8993	32.1378	25.5642		NA	Naturally Aspirated	AMS	Manual	5	
19.7174	27.8048	22.6868		NA	Naturally Aspirated	AMS	Automated Manual- Selectable	6	e.g. Au
20.6233	26.0617	22.7606		TC	Turbocharged	AMS	Semi-Automatic	6	
18.1488	26.2617	21.0791		TC	Turbocharged	AMS	Manual	6	
20.402	25.8545	22.5412		TC	Turbocharged	AMS	Semi-Automatic	6	
19.649	28.9961	22.9829		TC	Turbocharged	AMS	Semi-Automatic	8	
17.0411	22.7325	19.2048		NA	Naturally Aspirated	AMS	Semi-Automatic	8	
19.8843	23.7762	21.4655		SC	Supercharged	AMS	Semi-Automatic	8	

Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag	
Y	omated M	N	Manual with P	paddles)	2-Wheel DD	ADXV02.03PA	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles)	2-Wheel DD	VWV02.00U5N	5	DU	Diesel, ultr	
N	N	F			2-Wheel DD	ADXV02.(	10	GP	Gasoline (F	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXV02.03UA	10	GP	Gasoline (Premium	
MT with padd	N	F			2-Wheel DD	ADXV02.03UB	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXV02.03UB	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXJ02.0FUB	85	406	GP	Gasoline (Premium
N	N	A			All Wheel	IDADXV02.(	10	GP	Gasoline (F	
MT with padd	N	F			2-Wheel DD	ADXV02.(	10	GP	Gasoline (F	
Y	N	A			All Wheel	IDADXV02.(	10	GP	Gasoline (F	
Y	N	A			All Wheel	IDADXJ02.C	85	406	GP	Gasoline (F
Y	N	A			All Wheel	ADXV02.03UB	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXJ02.0FUB	85	406	GP	Gasoline (Premium
N	N	A			All Wheel	IDADXV02.(	10	GP	Gasoline (F	
MT with padd	N	F			2-Wheel DD	ADXV02.03UB	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXV02.03UB	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXJ03.03UF	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXJ03.03UF	10	GP	Gasoline (Premium	
ounded unadj	N	A			All Wheel	IDADXJ03.	10	GP	Gasoline (F	
Y	N	A			All Wheel	IDADXV04.(	10	GP	Gasoline (F	
ounded unadj	N	A			All Wheel	IDADXJ03.	10	GP	Gasoline (F	
Y	N	A			All Wheel	ADXV04.03UJ	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	DVWV06.3UA8	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXV02.03UB	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXJ02.0FUB	85	389	GP	Gasoline (Premium
Y	N	A			All Wheel	ADEXT02.04UB	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXJ02.0FUB	85	447	GP	Gasoline (Premium
Y	N	A			All Wheel	ADEXT02.0HUB	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADEXT03.0TLF	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADEXT03.03UG	5	DU	Diesel, ultra low s	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXV04.23UL	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXV04.23UL	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXJ03.03UF	10	GP	Gasoline (Premium	
N	N	A			All Wheel	ADXJ03.03UF	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXJ03.03UF	10	GP	Gasoline (Premium	
N	N	A			All Wheel	ADXJ03.03UF	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXJ03.03UF	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXV04.03UJ	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXV04.03UJ	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	ADXV04.03UJ	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXV02.03UA	10	GP	Gasoline (Premium	
Y	omated M	N	Manual with P	paddles)	All Wheel	ADXV02.03UA	10	GP	Gasoline (Premium	
N	N	A			All Wheel	ADXV02.53UK	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	DBXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A			All Wheel	ADXV04.03UJ	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	DBXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A			All Wheel	ADXV04.03UJ	10	GP	Gasoline (Premium	
Y	N	A			All Wheel	DBXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A			All Wheel	DBXV06.0501	85	333	GP	Gasoline (Premium
Y	N	R			2-Wheel DD	DBXV06.84LA	10	GP	Gasoline (Premium	

Y	omated	M	Manual with A	paddles)	All Wheel	DBGTV08.0V16	10		GPR	Gasoline (Premium
Y	omated	M	Manual with A	paddles)	All Wheel	DNEV06.5L83	10		GPR	Gasoline (Premium
Y	omated	M	Manual with A	paddles)	All Wheel	DNEV06.5L83	10		GPR	Gasoline (Premium
Y	omated	M	Manual with A	paddles)	All Wheel	DNEV05.2LR8	10		GP	Gasoline (Premium
N		N		A	All Wheel	IDAD XV05.	10		GP	Gasoline (I
Y	omated	M	Manual with A	paddles)	All Wheel	DNEV05.2LR8	10		GP	Gasoline (Premium
N		N		A	All Wheel	IDAD XV05.	10		GP	Gasoline (I
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.0U5N		5	DU	Diesel, ultra low s
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
N		N		F	2-Wheel	DVEV002.0U5N		5	DU	Diesel, ultra low s
N		N		F	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
Y		N		F	2-Wheel	DVEV002.5U3A	10		G	Gasoline (Regular
N		N		F	2-Wheel	DVEV002.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
N		N		F	2-Wheel	DVEV002.0U5N		5	DU	Diesel, ultra low s
N		N		F	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
Y		N		F	2-Wheel	DVEV002.5U3A	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
N		N		F	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
Y		N		F	2-Wheel	DVEV003.6U46	10		GP	Gasoline (Premium
Y		N		A	All Wheel	DNEV03.6U46	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.03SA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.0U5N		5	DU	Diesel, ultra low s
N		N		F	2-Wheel	DVEV002.0U5N		5	DU	Diesel, ultra low s
Y		N		F	2-Wheel	DVEV002.5U3A	10		G	Gasoline (Regular
N		N		F	2-Wheel	DVEV002.5U3M	10		G	Gasoline (Regular
N		N		A	All Wheel	DNEV02.03UA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel	DNEV002.03UA	10		GP	Gasoline (Premium
N		N		F	2-Wheel	DNEV002.03UA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.0U5N		5	DU	Diesel, ultra low s
Y		N		F	2-Wheel	DVEV002.0U36	10		G	Gasoline (Regular
N		N		F	2-Wheel	DVEV002.0U36	10		G	Gasoline (Regular
N		N		F	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
N		N		F	2-Wheel	DVEV002.0U5N		5	DU	Diesel, ultra low s
Y		N		F	2-Wheel	DVEV002.5U3A	10		G	Gasoline (Regular
N		N		F	2-Wheel	DVEV002.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV001.4PHE	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.0U5N		5	DU	Diesel, ultra low s
N		N		F	2-Wheel	DVEV002.0U5N		5	DU	Diesel, ultra low s
Y		N		F	2-Wheel	DVEV002.5U3A	10		G	Gasoline (Regular
N		N		F	2-Wheel	DVEV002.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV002.0U4S		5	DU	Diesel, ultra low s
N		N		F	2-Wheel	DVEV002.0U4S		5	DU	Diesel, ultra low s
Y		N		F	2-Wheel	DVEV002.5U3A	10		G	Gasoline (Regular
N		N		F	2-Wheel	DVEV002.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel	DVEV003.6U41	10		GP	Gasoline (Premium
Y		N		F	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
N		N		F	2-Wheel	DVEV002.03UA	10		GP	Gasoline (Premium
Y		N		A	All Wheel	DNEVJ02.03UA	10		GP	Gasoline (Premium
Y		N		A	All Wheel	DNEXT03.02UG		5	DU	Diesel, ultra low s
Y		N		A	All Wheel	DNEXT03.6U76	10		GP	Gasoline (Premium
Y		N		A	All Wheel	DNEXT03.0HEV	10		GP	Gasoline (Premium

Project Name	MPG	Gas Guzz	Gas Guzz	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MRCaded Release (15 pmi)	Not exempt	89	20						
MRCaded Release (15 pmi)	Not exempt	89	20						
MRCaded Release (15 pmi)	Not exempt	89	20						
MRCaded Release (15 pmi)	Not exempt					89	20		
MRCaded Release (15 pmi)	Not exempt					91	12		
MRCaded Release (15 pmi)	Not exempt					91	12		
MRCaded Release (15 pmi)	Not exempt					91	12		
MRCaded Release (15 pmi)	Not exempt					91	12		
MRCaded Release (15 pmi)	Not exempt	81	10						
MRCaded Release (15 pmi)	Not exempt	81	10						
MRCaded Release (15 pmi)	Not exempt	81	10						
MRCaded Release (15 pmi)	Not exempt	84	12						
MRCaded Release (15 pmi)	Not exempt	84	12						
MRCaded Release (15 pmi)	Not exempt	84	12						
MRCaded Release (15 pmi)	Not exempt					98	16		
MRCaded Release (15 pmi)	Not exempt					98	16		
MRCaded Release (15 pmi)	Not exempt					98	16		
MRCaded Release (15 pmi)	Not exempt							94	25
MRCaded Release (15 pmi)	Not exempt					100	15		
MRCaded Release (15 pmi)	Not exempt					100	15		
MRCaded Release (15 pmi)	Not exempt					107	15		
MRCaded Release (15 pmi)	Not exempt					107	15		
MRCaded Release (15 pmi)	Not exempt					107	15		
MRCaded Release (15 pmi)	Not exempt					90	28		
MRCaded Release (15 pmi)	Not exempt					90	28		
MRCaded Release (15 pmi)	Truck								
MRCaded Release (15 pmi)	Truck								
MRCaded Release (15 pmi)	Truck								
MRCaded Release (15 pmi)	Truck								
MRCaded Release (15 pmi)	Truck								
MRCaded Release (15 pmi)	Not exempt	84	13						
MRCaded Release (15 pmi)	Not exempt	81	10						
MRCaded Release (15 pmi)	Not exempt					90	13		
MRCaded Release (15 pmi)	Not exempt					90	13		
MRCaded Release (15 pmi)	Not exempt	84	13						
MRCaded Release (15 pmi)	Not exempt	84	13						
MRCaded Release (15 pmi)	Not exempt	81	10						
MRCaded Release (15 pmi)	Not exempt					98	16		
MRCaded Release (15 pmi)	Not exempt							94	25
MRCaded Release (15 pmi)	Not exempt					100	15		
MRCaded Release (15 pmi)	Not exempt	74	13						
MRCaded Release (15 pmi)	Not exempt							74	13
MRCaded Release (15 pmi)	Not exempt	102	13						
MRCaded Release (15 pmi)	Not exempt	89	11						
MRCaded Release (15 pmi)	Not exempt	89	11						
MRCaded Release (15 pmi)	Not exempt	86	7						
MRCaded Release (15 pmi)	Not exempt	86	7						
MRCaded Release (15 pmi)	Not exempt	86	7						
MRCaded Release (15 pmi)	Not exempt					100	11		

MRC	Leaded Release (pet)	gallon	Not exempt		
MRC	Leaded Release (pet)	gallon	Not exempt		
MRC	Leaded Release (pet)	gallon	Not exempt		
MRC	Leaded Release (pet)	gallon	Not exempt		
MRC	Unleaded Release (Recommended)	miles per gallon	Not exempt		
MRC	Leaded Release (pet)	gallon	Not exempt		
MRC	Unleaded Release (Recommended)	miles per gallon	Not exempt		
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	85	15
MRC	Leaded Release (pet)	gallon	Not exempt	85	15
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	85	15
MRC	Leaded Release (pet)	gallon	Not exempt	85	15
MRC	Leaded Release (pet)	gallon	Not exempt	85	15
MRC	Leaded Release (pet)	gallon	Not exempt	85	15
MRC	Leaded Release (pet)	gallon	Not exempt	81	7
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	81	7
MRC	Leaded Release (pet)	gallon	Not exempt	81	7
MRC	Leaded Release (pet)	gallon	Not exempt	81	7
MRC	Leaded Release (pet)	gallon	Not exempt	94	13
MRC	Leaded Release (pet)	gallon	Not exempt	94	13
MRC	Leaded Release (pet)	gallon	Not exempt	94	13
MRC	Leaded Release (pet)	gallon	Not exempt	94	13
MRC	Leaded Release (pet)	gallon	Not exempt	77	11
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	94	15
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	94	15
MRC	Leaded Release (pet)	gallon	Not exempt	94	15
MRC	Leaded Release (pet)	gallon	Not exempt	94	15
MRC	Leaded Release (pet)	gallon	Not exempt	94	15
MRC	Leaded Release (pet)	gallon	Not exempt	94	15
MRC	Leaded Release (pet)	gallon	Not exempt	94	15
MRC	Leaded Release (pet)	gallon	Not exempt	94	16
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	94	16
MRC	Leaded Release (pet)	gallon	Not exempt	94	16
MRC	Leaded Release (pet)	gallon	Not exempt	94	16
MRC	Leaded Release (pet)	gallon	Not exempt	94	16
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	94	16
MRC	Leaded Release (pet)	gallon	Not exempt	94	16
MRC	Leaded Release (pet)	gallon	Not exempt	94	16
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	92	33
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	92	33
MRC	Leaded Release (pet)	gallon	Not exempt	92	33
MRC	Leaded Release (pet)	gallon	Not exempt	92	33
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	102	16
MRC	(15 ppm) Leaded Release (pet)	gallon	Not exempt	102	16
MRC	Leaded Release (pet)	gallon	Not exempt	102	16
MRC	Leaded Release (pet)	gallon	Not exempt	102	16
MRC	Leaded Release (pet)	gallon	Not exempt	102	16
MRC	Leaded Release (pet)	gallon	Truck		
MRC	Leaded Release (pet)	gallon	Truck		
MRC	Leaded Release (pet)	gallon	Truck		
MRC	(15 ppm) Leaded Release (pet)	gallon	Truck		
MRC	Leaded Release (pet)	gallon	Truck		
MRC	Leaded Release (pet)	gallon	Truck		

Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadj
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C	
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre	
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values	
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v	
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unroun	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG valuwe and	
2400	2400	corrected unadj unrnd city highway CO2 and then the reounded number is correct. 17.8558	17.8558
2200	2200		
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and	
2400	2400	corrected 14 20 16 17.8558	17.8558
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and	
2400	2400	corrected unadj unrnd city highway CO2 and then the reounded number is correct. 17.8558	17.8558
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG valuwe and gallons per 100 value...these values were switched	
2600	2600		
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes	
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to	
2700	2700	S/S set to yes	
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrnd city CO2 value corrected, S	
3000	3000	S/S set to yes	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c	
2500	2500	14 18 15 17.1	17.1
2500	2500	corrected unadj unrounded highway and combined values	
2500	2500	14 19 16 17.4	17.4
2200	2200		
3150	3150	CO2 corrections, again Aug 14th, Aug 23 CO2 rounding....adjusted whole CO2 from unadjuste	
2600	2600	CO2 corrections, additional fuel costs in saving field, corrected Aug 14th	
3150	3150	CO2 corrections	
3150	3150	corrected city CO2 value, typo	
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected city unadj unrounded CO2 , Aug 14th	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected unadj and adj CO2 values, Aug 14th	
2850	2850	CO2 corrections	
2850	2850	CO2 corrections	
3000	3000		
2200	2200	CO2 corrections, Aug 14th correction	
2200	2200	CO2 corrections, Aug 14th	
2850	2850		
4050	4050	corrected unadj unrnd combined CO2 value Aug 14th	9.5
3150	3150		
4050	4050	correct adj unrounded 14 and rounded 16 comb CO2 values Aug 14th	10.3
3350	3350		
4050	4050	corrected Comb adj unrnd CO2 10	9.5
4050	4050	CO2 rounding correction on Aug 23rd	10.3
4400	4400		



5700 5700 corrected lock out to "yes" and AMS.  
 4400 4400 lock up to YES., CO2 corrections Aug 14, S/S set to yes, CO2 rounding correction Aug 23rd  
 4750 4750 adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes  
 3550 3550 corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th  
 3800 3800 CO2 rounding correction Aug 23rd  
 3550 3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
 4050 4050 CO2 rounding Aug 23rd then again on Aug 27  
 1800 1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
 2300 2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 corrected CO2 values, corrected fuel cost over 5 years  
 2150 2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
 2150 2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
 2400 2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 CO2 corrections, fuel spending corrected to \$400  
 2300 2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
 2300 2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
 2300 2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
 2700 2700 update after Verify release 10  
 2850 2850 UPDATE after Verify release 10  
 2300 2300 CO2 corrections  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 comb correction  
 2600 2600 CO2 corrections, CO2 rounding corrections Aug 20th  
 2100 2100 CO2 corrections  
 2300 2300 early label, upate after Verify release 10  
 2100 2100 corrected unadjusted unrounded CO2 highway and combined values and combined adjusted w  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 2150 2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
 1900 1900 FE and GHG ratings corrected to 7  
 2200 2200 CO2 corrections  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1250 1250 GHG rating corrected to 10  
 1750 1750 CO2 corrections; inhouse dervied 5-cycle formula corrected Aug 15th  
 1700 1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th, CO2 rounding corrections A  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1700 1700  
 1650 1650  
 2150 2150 CO2 corrections  
 2050 2050 CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
 2500 2500 CO2 correction  
 2500 2500 corrected CO2 values, CO2 rounding corrections Aug 20th, rounding Aug 23rd  
 2700 2700 CO2 corrections, CO2 rounding corrections Aug 20th  
 2500 2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections, CO2 rounding c  
 2500 2500 CO2 corrections  
 3000 3000 CO2 correction Aug 15th, CO2 rounding corrections Aug 20th  
 2700 2700 CO2 corrections

## 02

alue

gallons per 100 value...these values were switched

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E8MPG	miles per g
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gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85) PG	miles per gallon
---------	---------	---------	---------	--------	-----	---	------------------	------------------

yes

/S set to yes

sumption to 6.2 per ASTM rounding procedure

ity and highway CO<sub>2</sub> values

25.6	20.1038	13.5432	18.3117	15.3409	253	E	Ethanol (E85) PG	miles per gallon
------	---------	---------	---------	---------	-----	---	------------------	------------------

27.1	20.7407	13.7947	19.3602	15.8444	314	E	Ethanol (E85)	miles per gallon
------	---------	---------	---------	---------	-----	---	---------------	------------------

d weighted values not CO2 to tenths value that is imputed into Verify.

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85) PG	miles per gallon
------	---------	--------	---------	--------	-----	---	------------------	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85) PG	miles per gallon
------	--------	--------	---------	---------	-----	---	------------------	------------------

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)	miles per gallon
------	---------	--------	---------	--------	-----	---	---------------	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85) PG	miles per gallon
------	--------	--------	---------	---------	-----	---	------------------	------------------

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

roup, CO2 rounding Aug 23rd  
nrounded highway and combined CO2 values  
o 29 MPG

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

ed MPG value  
nd corresponding 5-cycle values  
cted calculated values

ction Aug 20th  
rrections Aug 20th

hole CO2 value  
ction Aug 20th

rrections Aug 20th

ug 20th

orrections Aug 20th, CO2 rounding Aug 23rd



	2	21	Two Seaters
	2	21	Two Seaters
	2	21	Two Seaters
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	1	14	Compact Cars
	1	14	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
SIDI;	2	25	Midsize Cars
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
cars	Derived 5-cycle label	6/22/2012	12265	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12092	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Derived 5-cycle label	8/28/2012	12549	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12093	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Derived 5-cycle label	8/28/2012	12551	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Derived 5-cycle label	8/28/2012	12550	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/22/2012	12228	N	N	
car	Vehicle Specific 5-cycle	6/22/2012	12229	N	N	Relabel - k
car	Vehicle Specific 5-cycle	8/15/2012	12227	N	N	
car	Vehicle Specific 5-cycle	6/22/2012	12230	N	N	Relabel - k
car	Vehicle Specific 5-cycle	8/15/2012	12226	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
cars	Derived 5-cycle label	4/26/2012	11490	N	N	
cars	Derived 5-cycle label	8/27/2012	12479	N	N	
	Vehicle Specific 5-cycle	7/11/2012	11319	N	N	
	Derived 5-cycle label	9/10/2012	12595	N	N	
	Vehicle Specific 5-cycle	9/28/2012	12158	N	N	
D	Derived 5-cycle label	6/11/2012	12437	N	N	
D	Vehicle Specific 5-cycle	7/16/2012	12105	N	N	
car	Vehicle Specific 5-cycle	4/8/2012	11510	N	N	
car	Vehicle Specific 5-cycle	12/11/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12106	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12108	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12111	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	8/27/2012	12122	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12115	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12113	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12116	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12119	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12117	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12440	N	N	
car	Vehicle Specific 5-cycle	8/20/2012	12211	N	N	

car	Vehicle Specific 5-cycle	7/12/2012	11087	N	N
car	Vehicle Specific 5-cycle	8/17/2012	12441	N	N
car	Vehicle Specific 5-cycle	1/14/2013	12234	N	N
car	Vehicle Specific 5-cycle	6/11/2012	12128	N	N
car	Vehicle Specific 5-cycle	6/20/2012	12442	N	N
car	Vehicle Specific 5-cycle	6/21/2012	12130	N	N
car	Vehicle Specific 5-cycle	6/22/2012	12466	N	N
car	Derived 5-cycle label	7/19/2012	12135	N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187	N	N
car	Derived 5-cycle label	6/25/2012	12272	N	N
car	Vehicle Specific 5-cycle	7/12/2012	12271	N	N
car	Vehicle Specific 5-cycle	7/30/2012	12435	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373	N	N
car	Derived 5-cycle label	7/30/2012	10277	N	N
car	Derived 5-cycle label	6/25/2012	12273	N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287	N	N
car	Vehicle Specific 5-cycle	1/16/2012	10186	N	N
car	Vehicle Specific 5-cycle	1/25/2012	11044	N	N
car	Vehicle Specific 5-cycle	1/16/2012	10532	N	N
car	Vehicle Specific 5-cycle	1/16/2012	10534	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527	N	N
car	Derived 5-cycle label	6/22/2012	12264	N	N
car	Derived 5-cycle label	6/25/2012	12268	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529	N	N
car	Vehicle Specific 5-cycle	6/11/2012	12277	N	N
car	Vehicle Specific 5-cycle	6/16/2012	11531	N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531	N	N
car	Vehicle Specific 5-cycle	6/18/2012	11372	N	N
car	Derived 5-cycle label	6/22/2012	12263	N	N
car	Vehicle Specific 5-cycle	6/20/2012	11219	N	N
car	Vehicle Specific 5-cycle	6/20/2012	11300	N	N
car	Vehicle Specific 5-cycle	6/16/2012	11532	N	N
car	Derived 5-cycle label	6/25/2012	12267	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535	N	N
car	Vehicle Specific 5-cycle	1/19/2012	12434	N	N
cars	Derived 5-cycle label	6/25/2012	12151	N	N
cars	Derived 5-cycle label	6/25/2012	12266	N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11534	N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11536	N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158	N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163	N	N
car	Vehicle Specific 5-cycle	6/23/2012	11539	N	N
car	Vehicle Specific 5-cycle	6/23/2012	11547	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554	N	N
	Derived 5-cycle label	6/18/2012	12432	N	N
	Vehicle Specific 5-cycle	6/11/2012	12276	N	N
	Derived 5-cycle label	6/11/2012	12431	N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563	N	N
D	Derived 5-cycle label	6/25/2012	12278	N	N
D	Derived 5-cycle label	6/25/2012	11559	N	N





2017-FFP 004972

in the first case for both forams (44% in *luteolus* and 50% in *luteolus*), in the second case for both forams (44% in *luteolus* and 50% in *luteolus*). Total effect was not significant.

1 Lithium Ion

266

5

37 On-Board

## STATEMENT

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

aust valves on a single camshaft. No change in valve overlaps.

MECHANICAL-HYDRAULIC  
CONTROLLED AND HYDRAULICALLY ADJUSTED  
CONTROLLED AND HYDRAULICALLY ADJUSTED  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

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HYDRAULIC  
HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

HYDRAULIC  
HYDRAULIC  
ND OUTLET CAMS 1 Lithium Ion 220 5 27 On-Board

HYDRAULIC  
HYDRAULIC

HYDRAULIC  
HYDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

LICALLY AND CONTROLLED ELECTRONICALLY  
AMS 1 NiMH 288 6 21.5 On-Board

es(2)ine3 od gear at this loer, f GTg e d t e r b y l i n d e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GTg e d t e r b y l i n d e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical Regen Brake	Both	Y	1AC Induction
------------------------	------	---	---------------

es(2)ine3 od gear at this loer, f GTg e d t e r b y l i n d e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GTg e d t e r b y l i n d e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GTg e d t e r b y l i n d e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GTg e d t e r b y l i n d e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GTg e d t e r b y l i n d e C, h e a g l s ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical BRAKE PEDAL TRIGGERED REGENERATIVE

1Other

Other BRAKE PEDAL TRIGGERED REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM 1Other

Motor	Ger	Rated Mot	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Cell V	Off Board	Camless V	Oil Viscosi
			GDI	Spark Ignit	Direct Injection	N			5W40 VW	50200
			CRDI	Common FN		N			5W40	
			GDI	Spark Ignit		N			5W40 VW	
			GDI	Spark Ignit	Non Direct Injection	N			5W40	
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignit		N			5W40 VW	
			GDI	Spark Ignit		N			5W40 VW	
			GDI	Spark Ignit		N			5W40 VW	
			GDI	Spark Ignit		N			5W40 VW	
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignit		N			5W40 VW	
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignit		N			5W40 VW	
h			GDI	Spark Ignit		N			5W30 VW	
			GDI	Spark Ignit		N			5W40 VW	
h			GDI	Spark Ignition	Direct Injection	N			5W30 VW	50400 /
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
		40	GDI	Spark Ignit	Non Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			CRDI	Common Rail	Direct Diesel Injection	N			5W30 VW	50700
			GDI	Spark Ignition	Direct Injection	N			5W30 VW	50400 /
			GDI	Spark Ignition	Direct Injection	N			5W30 VW	50400 /
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
			GDI	Spark Ignition	Direct Injection	N			5W40 VW	50200
h			GDI	Spark Ignition	Direct Injection	N			5W30 VW	50400 /
h			GDI	Spark Ignition	Direct Injection	N			5W30 VW	50400 /
h			GDI	Spark Ignition	Direct Injection	N			5W30 VW	50400 /
			GDI	Spark Ignit	Non Direct Injection	N			5W40	
			GDI	Spark Ignit	Non Direct Injection	N			5W40	
			GDI	Spark Ignit	Non Direct Injection	N			5W40 VW	50200
			MFI	Multipoint	Sequential fuel inject	N			5W30 VW	504 00
h			GDI	Spark Ignition	Direct Injection	N			5W30 VW	50400 /
			MFI	Multipoint	Sequential fuel inject	N			5W30 VW	504 00
h			GDI	Spark Ignition	Direct Injection	N			5W30 VW	50400 /
			MFI	Multipoint	Sequential fuel inject	N			5W30 VW	504 00
			MFI	Multipoint	Sequential fuel inject	N			5W30 VW	504 00
			MFI	Multipoint	Sequential fuel inject	N			0W40 / VW	50200

	MFI	Multipoint/sequential fuel inject	N	10W60 VW 50101
	MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
	MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
	GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
	GDI	Spark Ignit	N	10W60 VW
	GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
	GDI	Spark Ignit	N	10W60 VW
	CRDI	Common Rail Direct Diesel Inject	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Inject	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Inject	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
	GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
	GDI	Spark Ignition Direct Injection	N	5W40 / VW50200
	CRDI	Common Rail Direct Diesel Inject	N	5W40
	CRDI	Common Rail Direct Diesel Inject	N	5W40
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Inject	N	5W40
	MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Inject	N	5W40
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
3 PHASE PERMANENT MAGNET	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Inject	N	5W40
	CRDI	Common Rail Direct Diesel Inject	N	5W40
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	CRDI	Common Rail Direct Diesel Inject	N	5W40 VW 50501
	CRDI	Common Rail Direct Diesel Inject	N	5W40 VW 50501
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Inject	N	5W30 VW 50700
3 PHASE CURRENT PERM. MAGNET	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200

Stop/Start Stop/Start Trans in FE Trans as I Model Typ Charge De Charge De Charge Su Charge Su EPA Calcul

N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6) A3 frt man
N	No	Auto(AM-S6)	Auto(AM-S6) quattro
N	No	Auto(AV-S8)	Auto(AV-S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S6)	Auto(AV-S6)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8) Audi A6 CVT
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi A6 quattro
Y	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi Q7
N	No	Auto(S8)	Auto(S8)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Manual(M6)	Manual(M6) TRS
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)



<del>N</del> 50500	No	Auto(AM-S6) Auto(AM-S7)
<del>Y</del> 0700	Yes	Auto(AM-S6) Auto(AM-S7)
<del>Y</del> 0700	Yes	Auto(AM-S6) Auto(AM-S7)
<del>N</del> 50500	No	Auto(AM-S6) Auto(AM-S6)
<del>N</del> 50500	No	Manual(M6) Manual(M6) Gallardo C
<del>N</del> 50500	No	Auto(AM-S6) Auto(AM-S6)
<del>N</del> 50500	No	Manual(M6) Manual(M6) Gallardo S
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
<del>N</del>	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) C M6
N	No	Auto(S6) Auto(S6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Tiguan front
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Touareg Hybrid

Model Year	Model	Calculated EPA Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
30.8		6	6 DAD XV02.03PA	7			
46.2		9	8 DVW XV02.	5			
30.4		6	6 DAD XV02.0	7			
30.9		6	6 DAD XV02.03UA	5			
35.2		7	7 DAD XV02.03UB	5			
30.8		6	6 DAD XV02.03UB	5			
30.9		6	6 DAD XJ02.0FUB	5			
33.2		7	7 DAD XV02.0	5			
35.2		7	7 DAD XV02.0	5			
30.8		6	6 DAD XV02.0	5			
30.9		6	6 DAD XJ02.0	5			
30.8		6	6 DAD XV02.03UB	5			
30.9		6	6 DAD XJ02.0FUB	5			
33.2		7	7 DAD XV02.0	5			
36.9		7	7 DAD XV02.03UB	5			
30.8		6	6 DAD XV02.03UB	5			
28.1		5	5 DAD XJ03.03UF	5			
27.5		5	5 DAD XJ03.03UF	5			
27.5		5	5 DAD XJ03.0	5			
27.1		5	5 DAD XV04.0	5			
27.5		5	5 DAD XJ03.0	5			
24.4		4	4 DAD XV04.03UJ	5			
19.3		3	3 DVW XV06.3UA8	5			
29.5		6	6 DAD XV02.03UB	5			
29.5		6	6 DAD XJ02.0FUB	5			
28.8		6	6 DAD XT02.04UB	5			
29.6		6	6 DAD XJ02.0FUB	5			
34		7	7 DAD XT02.0HUB	5			
22.9		4	4 DAD XT03.0TLF	5			
28.1		5	4 DAD XT03.03UG	5			
23		4	4 DAD XV04.23UL	5			
22.6		4	4 DAD XV04.23UL	5			
26.9		5	5 DAD XJ03.03UF	5			
23.5		5	5 DAD XJ03.03UF	5			
26.9		5	5 DAD XJ03.03UF	5			
23.5		5	5 DAD XJ03.03UF	5			
26.4		5	5 DAD XJ03.03UF	5			
25.5		5	5 DAD XV04.03UJ	5			
25.5		5	5 DAD XV04.03UJ	5			
23.6		4	4 DAD XV04.03UJ	5			
33.3		7	7 DAD XV02.03UA	5			
33.3		7	7 DAD XV02.03UA	5			
25.6		5	5 DAD XV02.53UK	5			
17.2		2	2 DBEXV06.0501	5			
23.6		4	4 DAD XV04.03UJ	5			
17.4		2	2 DBEXV06.0501	5			
21.8		4	4 DAD XV04.03UJ	5			
17.2		2	2 DBEXV06.0501	5			
17.4		2	2 DBEXV06.0501	5			
15.9		2	2 DBEXV06.84LA	5			

12.6		1	1DBGTV08.0V16	5
16.4		2	2DNLXV06.5L83	5
14.5		1	1DNLXV06.5L83	5
19.4		3	3DADXV05.2LR8	5
17.4		3	3DADXV05.	5
19.3		3	3DADXV05.2LR8	5
16.1		2	2DADXV05.	5
43.7		8	7DVWXV02.0U5N	5
31.8		6	6DVWXV02.03PA	7
43.4		8	7DVWXV02.0U5N	5
30.7		6	6DVWXV02.03PA	7
31.6		6	6DVWXV02.5A59	7
31.9		6	6DVWXV02.5M59	7
31.5		6	6DVWXV02.03PA	7
43.4		8	7DVWXV02.0U5N	5
30.7		6	6DVWXV02.03PA	7
30.3		6	6DVWXV02.5A59	7
32.3		6	6DVWXV02.03PA	7
31.8		6	6DVWXV02.03PA	7
25.8		5	5DVWXV03.6U46	5
24.8		5	5DVWXV03.6U46	5
32.4		6	6DVWXV02.03SA	5
46.2		9	8DVWXV02.0U5N	5
46		9	8DVWXV02.0U5N	5
33.1		7	7DVWXV02.5A59	7
32.2		7	7DVWXV02.5M59	7
28.5		5	5DADXV02.03UA	5
34.8		7	7DADXV02.03PA	7
31.2		6	6DADXV02.03PA	7
35		7	7DVWXV02.03PA	7
46.2		9	8DVWXV02.0U5N	5
32.9		6	6DVWXV02.0U36	5
34.7		7	7DVWXV02.0U36	5
32.6		7	7DVWXV02.03PA	7
46		9	8DVWXV02.0U5N	5
33.1		7	7DVWXV02.5A59	7
32.2		7	7DVWXV02.5M59	7
60.9		10	10DVWXV01.4PHE	7
44.2		8	7DVWXV02.0U5N	5
46		9	8DVWXV02.0U5N	5
33.1		7	7DVWXV02.5A59	7
32.2		7	7DVWXV02.5M59	7
44.6		9	8DVWXV02.0U4S	5
46.4		9	8DVWXV02.0U4S	5
31.9		6	6DVWXV02.5A59	7
31.7		7	7DVWXV02.5M59	7
28.5		6	6DVWXV03.6U41	5
29.9		6	6DVWXJ02.03UA	5
26.4		5	5DVWXJ02.03UA	5
29.6		6	6DVWXJ02.03UA	5
23.3		6	5DADXT03.02UG	5
25		4	4DVWXT03.6U76	5
28.2		5	5DVWXT03.0HEV	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DADXV02.03UA 5

DADXV02.03UA 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

Highway Miles (City/Highway)	City/Highway	City/Highway	City/Highway	City/Highway
	400	432	319	381
3100		340	245	297
	400	442	296	376
	400	442	316	385
600		373	304	342
	400	437	297	374
	400	435	306	377
600		397	276	343
600		373	304	342
	400	437	297	374
	400	435	306	377
	400	437	297	374
	400	435	306	377
600		397	276	343
1350		360	272	320
	400	437	297	374
	1400	482	326	412
	1900	498	321	418
	1900	498	321	418
	1900	515	313	424
	1900	498	321	418
	3400	554	345	460
	6150	675	430	565
	900	444	333	394
	900	444	333	394
	900	450	314	389
	900	452	322	393
600		369	298	337
	4150	573	411	500
	1400	541	369	464
	4150	562	379	480
	4150	558	398	486
	1900	488	321	413
	2650	441	355	402
	1900	488	321	413
	2650	441	355	402
	1900	500	341	429
	2650	530	330	440
	2650	530	330	440
	3400	580	347	475
600		394	284	345
600		394	284	345
	2650	499	350	432
	8650	787	474	646
	4150	590	364	488
	8650	768	469	633
	5150	638	370	517
	8650	787	474	646
	8650	768	469	633
	10400	840	501	688

	16900	1050	599	847
	10400	836	481	676
	12150	902	547	742
	6150	657	447	562
	7400	734	511	634
	6150	660	446	564
	8650	768	452	626
2600		354	262	313
100		401	291	351
2600		365	250	313
	400	430	298	371
850		396	310	358
850		408	289	354
	400	421	310	371
2600		365	250	313
	400	430	298	371
100		418	329	378
100		403	283	349
100		425	279	360
	1900	507	334	429
	2650	523	351	446
100		405	257	338
3100		340	245	297
3100		342	243	297
1350		374	286	334
1350		388	271	335
	1400	460	330	401
1100		379	271	331
100		416	287	358
1100		372	280	331
3100		340	245	297
850		381	299	344
2100		361	262	316
600		403	272	344
3100		342	243	297
1350		374	286	334
1350		388	271	335
5350		211	182	198
2850		352	258	310
3100		342	243	297
1350		374	286	334
1350		388	271	335
3100		331	240	290
3350		330	239	289
850		401	289	351
1350		391	275	339
	900	449	319	390
	900	430	341	390
	1900	484	336	417
	900	435	343	394
	900	517	351	442
	3400	520	391	462
	1900	447	372	413

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885	495	709.5	1050.2	598.8	847.1
705	353	546.6	836	481	676.2
771	418	612.2	902	547	742.2
552	349	460.6	657	447	562.5
635	370	515.8	734	511	633.6
556	348	462.4	660	446	563.7
681	391	550.5	768	452	625.8
272	184	232.4	354.3	261.8	312.7
334.3	211.2	278.9	401	290.6	351.3
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
323.7	227.6	280.5	396.3	310.3	357.6
335.2	207.2	277.6	407.6	288.8	354.1
332	220.9	282	421	310	371
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
335.4	235.6	290.5	418.2	329.4	378.2
327.2	207.7	273.4	402.8	282.7	348.8
346.3	202.5	281.6	425.2	279.3	359.5
419	253	344.3	506.7	333.8	428.9
434	265	358	523	351.1	445.6
321	213	272.4	404.7	256.6	338.1
259.8	171.2	219.9	339.8	244.6	297
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
372	240	312.6	459.5	330.5	401.4
295.1	203.2	253.7	379.2	271.3	330.6
340.4	215.5	284.2	415.9	287	357.9
300.9	196.7	254	372	280.4	330.8
259.8	171.2	219.9	339.8	244.6	297
315	214	269.6	381.3	298.8	344.2
307	192	255.2	360.5	262	316.2
333.9	197.2	272.4	403.3	271.8	344.1
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
155	134	145.6	211	182	198
270	181	230	351.9	257.7	309.5
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
268	179	228	331	240	290
266	162	219.2	330	239	289
328.2	217.8	278.5	400.9	289.4	350.7
339.6	206.8	279.8	391.3	275	339
372	238	311.7	449	319	390.5
339.6	244.4	296.8	429.9	341.3	390
407	248	335.4	484	336	417.4
343.6	246	299.7	434.6	343.5	393.6
422	248	343.7	517	351	442.3
416	281	355.2	520.1	390.6	461.8
354	267	314.8	446.9	371.8	413.1

City	Wounded to come to aid	Distance	Comb Vol Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT
	N	4.2					
	N	2.9					
	N	4.2					
	N	4.2					
	N	3.8					
	N	4.2					
	N	4.2					
	N	3.8					
	N	3.8					
	N	4.2					
	N	4.2					
	N	4.2					
	N	4.2					
	N	3.8					
	N	3.6					
	N	4.2					
	N	4.5					
	N	4.8					
	N	4.8					
	N	4.8					
	N	4.8					
	N	5.3					
	N	6.2					
	N	4.3					
	N	4.3					
	N	4.3					
	N	4.3					
	N	3.8					
	N	5.6					
	N	4.5					
	N	5.6					
	N	5.6					
	N	4.8					
	N	5					
	N	4.8					
	N	5					
	N	4.8					
	N	5					
	N	5					
	N	5.3					
	N	3.8					
	N	3.8					
	N	5					
	N	7.1					
	N	5.6					
	N	7.1					
	N	5.9					
	N	7.1					
	N	7.1					
	N	7.7					

N	10	10
N	7.7	7.7
N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.2	2.2
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8

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[illegible]

mined)

















To: Joel Ball/AA/USEPA/US@EPA[]

Cc: Ex. 7 @arb.ca.gov] Ex. 7 @arb.ca.gov] Ex. 7

**Ex. 7**

From: Ex. 7

Sent: Mon 9/17/2012 10:54:10 PM

Subject: VW's new laboratory - audit schedule  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Joel,

I would like to inform you that we finally moved our emissions laboratory from Westlake, CA to Oxnard, CA.

We are proud that the operation is now set up and ready to run the first tests.

Mr. Ex. 7 the general manager of the Volkswagen Oxnard test facility, already informed Ex. 7 and scheduled an appointment for an audit of the new laboratory.

Ex. 7 gave us the "go" to run in-use emission tests from today on until he comes in on November 6th 2012 to check the equipment and procedures we use and hopefully certifies the lab.

The analyzing equipment we is the same than in Westlake, we basically only got new dynamometers and SHED chambers.

Since I don't want to get in any conflict with our time schedule for the IUVF program, I would like to start procuring and testing the first MY2008 high mileage customer vehicles by the beginning of October 2012. That will be before ARB has performed the audit.

When Ex. 7 comes in, I will show him what we tested until that point and I believe we talk about the IUVF program we already finished earlier this year.

I am confident that we fulfill all requirements. We will make sure that the quality of our processes and the high standard of testing you are used to from our "old" Westlake operation over the years will be maintained.

Matthias and his group is working hard to get the last peaches together, but the correlation between our old lab and the new one are already almost identical.

My only question is, what do I need to do to create the new dyno settings in the "Verfiy System" to be able to submit the tests we performed throughout the IUVF?



Could you please advise who to contact and what exact information he/she will need?

Would be great if you could help me out with that.

Please let me know if you have any concerns or questions.

I will proceed that way unless instructed otherwise from you.

Thank you very much.

Best regards,



**Ex. 7**

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 9/18/2012 6:26:12 PM  
**Subject:** VW Group - Running Change to add Q5 carline for MY13 Audi Test Group  
DADXVJ03.03UF

Hello Jim,

We submitted a revised application as well as running change letter for the addition of the Q5 carline to Audi Test group DADXJ03.03UF, with new evaporative family DADXR0140B8B. This new evaporative family is similar to previously certified evap. family DADXR0140B8A, but now includes a 5 gram bleed canister. New evaporative tests (EDV) were performed for the Q5 however the supporting exhaust tests were for fuel economy only (FEDV).

We have also submitted a certificate request for this Q5 addition.

Please let us know if you have any questions during your review.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207



**To:** David Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Tue 9/18/2012 6:38:04 PM  
**Subject:** RE: 2013 FE Guide - Verify data attached

Looks okay to me, Dave. Thanks

From: Good.David@epamail.epa.gov [mailto:Good.David@epamail.epa.gov]  
Sent: Monday, September 17, 2012 3:29 PM  
To: Thomas, Richard (EEO)  
Subject: 2013 FE Guide - Verify data attached

Richard,

Here's the data as of about 2PM today. The Q5 labels seemed OK to me.

Let me know if you see any errors that need correction.

(See attached file: VW\_Group\_2013 FEGuide-all rel dates-no-sales-9-17-2012.xlsx)

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; N=David Bochenek/OU=AA/O=USEPA/C=US@EPA;CN=David Vanamburg/OU=AA/O=USEPA/C=US@EPA;CN=Ben Haynes/OU=AA/O=USEPA/C=US@EPA;CN=John Spieth/OU=AA/O=USEPA/C=US@EPA[]; N=David Vanamburg/OU=AA/O=USEPA/C=US@EPA;CN=Ben Haynes/OU=AA/O=USEPA/C=US@EPA;CN=John Spieth/OU=AA/O=USEPA/C=US@EPA[]; N=Ben Haynes/OU=AA/O=USEPA/C=US@EPA;CN=John Spieth/OU=AA/O=USEPA/C=US@EPA[]; N=John Spieth/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Wed 9/19/2012 2:47:04 PM  
**Subject:** Re: VW testing schedule

Hello Mike,

Site 329 is currently not available for any diesel testing, not just particulates as I indicated to your Engineers. Sorry for the confusion. It is likely that VW324 10220/13 will not test today. I'll keep you informed of the status of the site.

361 730 136/13 did test, and is currently in the Hot Soak SHED. Your Engineers asked to let them know if the start - stop function worked properly. I checked with the vehicle tester and it worked properly. We do need the nominal voltage for this vehicle for next week's four bag test.

Again, if you have any questions or concerns, please contact me.

Thanks Mike,

Vince Mazaitis

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** Vincent Mazaitis/AA/USEPA/US@EPA  
**Cc:** Jim Snyder/AA/USEPA/US@EPA, "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
**Date:** 09/17/2012 12:10 PM  
**Subject:** VW testing schedule

Hello Vincent,

To follow up from my voice message – would you be able to send a schedule for the testing for our Jetta Hybrid and Beetle TDI? We would like to have 2 or 3 staff there for the start of testing if possible.

Also, we have a new colleague here from Germany, and we would like to request a small tour of your facility (maybe after one of the tests if this works for you).

Please let me know or feel free to call me if you wish to discuss.

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA[]; avidA Wright/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA[]; oel Dalton/AA/USEPA/US@EPA[]  
**Cc:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 9/20/2012 12:56:07 PM  
**Subject:** RE: Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles

Hello all:

I have tried to reach Jim and Joel and left messages with each. I would like to verify the status of this meeting scheduled for today. If necessary, we can delay until tomorrow.

Please let me know since I would require about 1 hour+ travel time to Ann Arbor.

Regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, September 17, 2012 10:58 AM  
To: Wright.DavidA@epamail.epa.gov; Dalton.Joel@epamail.epa.gov; Kata, Leonard (EEO)  
Subject: Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles

Len there is a slight chance that I won't be back by thursday for this mtg but I will be in Friday. In case there is a change, Dave's number is 214-4467 and Len's number is 248-754-4204.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov



**To:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**Cc:** "Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/20/2012 1:09:45 PM  
**Subject:** RE: Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles

Len,

The meeting is still scheduled for 1 pm and Jim and Joel are here today.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

From: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, DavidA Wright/AA/USEPA/US@EPA, Joel Dalton/AA/USEPA/US@EPA  
Cc: "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>, "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>  
Date: 09/20/2012 08:56 AM  
Subject: RE: Volkswagen Meeting w/EPA -evap emission testing for future advanced technology vehicles

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Phone: (248) 754-4204  
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**Bcc:** []  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/20/2012 1:09:45 PM  
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David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

**From:** "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA, DavidA Wright/AA/USEPA/US@EPA, Joel Dalton/AA/USEPA/US@EPA  
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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;Domenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; omenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; othar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; liver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Sent:** Thur 9/20/2012 3:20:28 PM  
**Subject:** Rescheduled: RE: Audi Meeting with EPA (Oct 29 01:00 PM EDT in AA-C126/AA-OTAQ-OFFICE@EPA)

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation
- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

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Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;Domenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; omenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; othar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; liver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Sent:** Thur 9/20/2012 3:22:28 PM  
**Subject:** Information Update - Room has changed: RE: Audi Meeting with EPA

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation
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- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification

**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/20/2012 5:56:04 PM  
**Subject:** re: 2013 FE Guide - Minors Errors to correct in Verify; correcting them will save my review time (every time I run the FE Guide query)  
[VW Group 2013 FE Guide-all rel dates-no-sales-9-17-2012.xlsx](#)

Richard,

Enclosed are the data in EPA's Verify data base as of September 17, 2012.

Please correct the errors in the Indexes which are highlighted in green fill in the first few columns. While these errors are minor and did not hold up posting the data on [www.fueleconomy.gov](http://www.fueleconomy.gov), they will save me a few minutes of my review time each time I run the 2013 FE Guide query (every two weeks or more frequently).

Thanks

EPA comr	VERIFY cc	Model Yr (Mfr Name	Division (ICarline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013 Audi	Audi	A3 ADX	59	2.0 4
Diesel;		2013 Audi	Audi	A3 ADX	73	2.0 4
		2013 Audi	Audi	A3 ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro ADX	60	2.0 4
		2013 Audi	Audi	A4 ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro ADX	102	2.0 4
		2013 Audi	Audi	A4 quattro ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet quattro ADX	39	2.0 4
		2013 Audi	Audi	A5 Cabriolet ADX	104	2.0 4
		2013 Audi	Audi	A5 quattro ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro ADX	103	2.0 4
		2013 Audi	Audi	A5 quattro ADX	41	2.0 4
		2013 Audi	Audi	A6 ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro ADX	76	3.0 6
OK for wet Y		2013 Audi	Audi	A8 ADX	128	3.0 6
		2013 Audi	Audi	A8 ADX	98	4.0 8
OK for wet Y		2013 Audi	Audi	A8L ADX	129	3.0 6
		2013 Audi	Audi	A8L ADX	97	4.0 8
		2013 Audi	Audi	A8L ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro ADX	134	2.0 4
		2013 Audi	Audi	allroad quattro ADX	101	2.0 4
		2013 Audi	Audi	Q5 ADX	91	2.0 4
		2013 Audi	Audi	Q5 ADX	105	2.0 4
Hybrid;		2013 Audi	Audi	Q5 Hybrid ADX	95	2.0 4
		2013 Audi	Audi	Q7 ADX	61	3.0 6
Diesel;		2013 Audi	Audi	Q7 ADX	53	3.0 6
		2013 Audi	Audi	RS5 ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet ADX	52	4.2 8
		2013 Audi	Audi	S4 ADX	42	3.0 6
		2013 Audi	Audi	S4 ADX	45	3.0 6
		2013 Audi	Audi	S5 ADX	43	3.0 6
		2013 Audi	Audi	S5 ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet ADX	44	3.0 6
		2013 Audi	Audi	S6 ADX	48	4.0 8
		2013 Audi	Audi	S7 ADX	47	4.0 8
		2013 Audi	Audi	S8 ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe quattro ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster quattro ADX	67	2.0 4
		2013 Audi	Audi	TTRS Coupe ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental BEK Flying Spur	110	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX	108	4.0 8
		2013 Bentley	Bentley Motors	Continental BEX	113	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX C	107	4.0 8
		2013 Bentley	Bentley Motors	Continental BEX C	111	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX Sports Continental	112	6.0 12
		2013 Bentley	Bentley Motors	Mulsanne BEX	96	6.8 8
		2013 Bugatti	Bugatti	Veyron BGT	88	8.0 16



	2013	Lamborghini	Lamborghini	Aventador Coupe	92	6.5	12
	2013	Lamborghini	Lamborghini	Aventador Roadster	93	6.5	12
	2013	Lamborghini	Lamborghini	Gallardo Coupe	30	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo CNLX	32	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo Spyder	31	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel;	2013	Volkswagen	Volkswagen	BEETLE VWX	94	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	19	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE VWX	84	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	89	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	17	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE VWX	27	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	20	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	85	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	90	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	18	2.5	5
	2013	Volkswagen	Volkswagen	6C VWX	1	2.0	4
	2013	Volkswagen	Volkswagen	6C VWX	4	2.0	4
	2013	Volkswagen	Volkswagen	6C VWX	2	3.6	6
	2013	Volkswagen	Volkswagen	6C 4MOTION VWX	3	3.6	6
	2013	Volkswagen	Volkswagen	Eos VWX	21	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF VWX	72	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF VWX	81	2.0	4
	2013	Volkswagen	Volkswagen	GOLF VWX	16	2.5	5
	2013	Volkswagen	Volkswagen	GOLF VWX	26	2.5	5
	2013	Volkswagen	Volkswagen	Golf R VWX	57	2.0	4
	2013	Volkswagen	Volkswagen	GTI VWX	22	2.0	4
	2013	Volkswagen	Volkswagen	GTI VWX	23	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	50	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta VWX	71	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	86	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	87	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	51	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta VWX	80	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	15	2.5	5
	2013	Volkswagen	Volkswagen	Jetta VWX	25	2.5	5
Hybrid;	2013	Volkswagen	Volkswagen	Jetta Hybrid VWX	100	1.4	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	74	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	79	2.0	4
	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	14	2.5	5
	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	24	2.5	5
Diesel;	2013	Volkswagen	Volkswagen	Passat VWX	62	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Passat VWX	64	2.0	4
	2013	Volkswagen	Volkswagen	Passat VWX	83	2.5	5
	2013	Volkswagen	Volkswagen	Passat VWX	82	2.5	5
	2013	Volkswagen	Volkswagen	Passat VWX	63	3.6	6
	2013	Volkswagen	Volkswagen	TIGUAN VWX	68	2.0	4
	2013	Volkswagen	Volkswagen	TIGUAN VWX	56	2.0	4
	2013	Volkswagen	Volkswagen	TIGUAN 4MOTION	55	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Touareg VWX	54	3.0	6
	2013	Volkswagen	Volkswagen	Touareg VWX	78	3.6	6
Hybrid;	2013	Volkswagen	Volkswagen	Touareg Hybrid	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S6)	21	28	24				26.6	38.2	30.8102
Auto(AM-S6)	30	42	34				39.0935	59.3437	46.1856
Manual(M6)	21	30	24				25.3	40.3	30.3902
Auto(AM-S6)	21	28	24				27.2	37.1	30.9119
Auto(AV-Si	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	24	30	26				30.4	39.9	34.048
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S7)	16	23	18				19.1	30	22.8332
Auto(AM-S7)	16	22	18				19.2	28.9	22.6159
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	26	21				22.1	34.7	26.4165
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Manual(M6)	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	11	18	13				12.9	21.8	15.8033
Auto(AM-S7)	8	15	10				10	17.9	12.4782

Auto(AM-S7)	11	18	13	12.6	25.2	16.2581
Auto(AM-S7)	10	16	12	11.5	21.2	14.4817
Auto(AM-S6)	13	20	16	16.1	25.4	19.276
Manual(M6)	12	20	15	14	24	17.2308
Auto(AM-S6)	13	20	16	16	25.4	19.197
Manual(M6)	12	20	14	13	22.6	16.0722
Auto(AM-S6)	29	39	32	37.3	55.3	43.7011
Auto(AM-S6)	22	30	25	26.5	42.0656	31.7942
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M5)	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S6)	21	29	24	26.8	40.2092	31.532
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S6)	22	31	25	26.977	42.4936	32.2814
Manual(M6)	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S6)	22	30	25	27.5	41.5	32.4219
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Manual(M6)	19	27	22	23.9	37.1	28.456
Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229
Manual(M6)	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M5)	24	34	28	28.8	46.2	34.6771
Manual(M6)	22	33	26	26.5556	44.9945	32.56
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S7)	42	49	45	57.2	66.2	60.9274
Auto(AM-S6)	29	39	33	37.6	56.2	44.1798
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	30	40	34	37.9	56.8	44.5744
Manual(M6)	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M5)	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S6)	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Model	Fuel	Unrd Comb Unr	Guzzler?	Air Aspir	IAir Aspira	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbocharg	AdS	Automated Manual-	Selectable	(e.g. Au
29.8946	41.5209	34.2046			TC	Turbocharg	AdS	Automated Manual-	Selectable	(e.g. Au
20.8146	29.9953	24.1394			TC	Turbocharg	Ad	Manual		6
20.891	28.1035	23.6187			TC	Turbocharg	AdS	Automated Manual-	Selectable	(e.g. Au
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
20.402	28.949	23.5279			TC	Turbocharg	Ad	Semi-Automatic		8
22.2425	32.0861	25.8049			TC	Turbocharg	Ad	Manual		6
23.6355	30.6684	26.3554			TC	Turbocharg	AdV	Selectable Continuously Variable		8 (e.g. C
20.3576	29.8271	23.7508			TC	Turbocharg	Ad	Semi-Automatic		8
20.402	28.949	23.5279			TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
20.402	28.949	23.5279			TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049			TC	Turbocharg	Ad	Manual		6
24.5044	32.5529	27.5721			TC	Turbocharg	AdV	Selectable Continuously Variable		8 (e.g. C
20.3576	29.8271	23.7508			TC	Turbocharg	Ad	Semi-Automatic		8
18.3949	27.2332	21.5408			SC	Supercharg	Ad	Semi-Automatic		8
17.8058	27.5484	21.1758			SC	Supercharg	Ad	Semi-Automatic		8
00, 314-08(e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in co	17.8058	27.5484	21.1758		SC	Superchar	SA	Semi-Auto		8
17.2616	28.4347	20.9695			TC	Turbochar	SA	Semi-Auto		8
00, 314-08(e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in co	17.8058	27.5484	21.1758		SC	Superchar	SA	Semi-Auto		8
16.0273	25.8053	19.3219			TC	Turbocharg	Ad	Semi-Automatic		8
13.1387	20.6025	15.6978	G		NA	Naturally Aspirated		Semi-Automatic		8
19.9584	26.6824	22.5112			TC	Turbocharg	Ad	Semi-Automatic		8
19.9584	26.6824	22.5112			TC	Turbocharg	Ad	Semi-Automatic		8
19.7289	28.2351	22.823			TC	Turbocharg	Ad	Semi-Automatic		8
19.6619	27.5771	22.5781			TC	Turbocharg	Ad	Semi-Automatic		8
24.0075	29.7936	26.3065			TC	Turbocharg	Ad	Semi-Automatic		8
15.522	21.5458	17.7559			SC	Supercharg	Ad	Semi-Automatic		8
18.74	27.62	21.9099			TC	Turbocharg	Ad	Semi-Automatic		8
15.7409	23.3075	18.4339			NA	Naturally Aspirated	AdMS	Automated Manual-	Selectable	7(e.g. Au
15.8793	22.1836	18.2078			NA	Naturally Aspirated	AdMS	Automated Manual-	Selectable	7(e.g. Au
18.117	27.558	21.419			SC	Supercharg	AdMS	Automated Manual-	Selectable	7(e.g. Au
17.0438	26.023	20.1767			SC	Supercharg	Ad	Manual		6
18.117	27.558	21.419			SC	Supercharg	AdMS	Automated Manual-	Selectable	7(e.g. Au
17.0438	26.023	20.1767			SC	Supercharg	Ad	Manual		6
17.6699	25.953	20.6333			SC	Supercharg	AdMS	Automated Manual-	Selectable	7(e.g. Au
16.761	26.9697	20.2022			TC	Turbocharg	AdMS	Automated Manual-	Selectable	7(e.g. Au
16.761	26.9697	20.2022			TC	Turbocharg	AdMS	Automated Manual-	Selectable	7(e.g. Au
15.2801	25.5632	18.6574			TC	Turbocharg	Ad	Semi-Automatic		8
22.407	31.1674	25.6515			TC	Turbocharg	AdMS	Automated Manual-	Selectable	(e.g. Au
22.407	31.1674	25.6515			TC	Turbocharg	AdMS	Automated Manual-	Selectable	(e.g. Au
17.751	25.2021	20.4751			TC	Turbocharg	Ad	Manual		6
11.2476	18.7327	13.7134	G		TC	Turbocharg	Ad	Semi-Automatic		6
15.0109	24.4645	18.1706			TC	Turbocharg	Ad	Semi-Automatic		8
11.5043	18.877	13.9574	G		TC	Turbocharg	Ad	Semi-Automatic		6
14.0639	23.9773	17.2766	G		TC	Turbocharg	Ad	Semi-Automatic		8
11.2476	18.7327	13.7134	G		TC	Turbocharg	Ad	Semi-Automatic		6
11.5043	18.877	13.9574	G		TC	Turbocharg	Ad	Semi-Automatic		6
10.5402	17.7129	12.8889	G		TC	Turbocharg	Ad	Semi-Automatic		8
8.4232	14.7698	10.4424	G		TC	Turbocharg	AdMS	Automated Manual-	Selectable	7(e.g. Au

10.6055	18.4729	13.1199	G	NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
9.7957	16.2453	11.9264	G	NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
13.4655	19.7573	15.718	G	NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
12.0883	19.9831	14.7021	G	NA	Naturally Aspirated	Manual	6
13.3954	19.7741	15.6701	G	NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
11.5388	19.5451	14.1465	G	NA	Naturally Aspirated	Manual	6
28.6469	38.87	32.4925		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
22.0202	29.5574	24.8746		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517		TC	Turbocharged	Manual	6
22.2864	28.5683	24.7338		NA	Naturally Aspirated	Semi-Automatic	6
21.7201	30.6767	25.0054		NA	Naturally Aspirated	Manual	5
21.1383	28.6751	23.9738		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517		TC	Turbocharged	Manual	6
21.2302	26.9749	23.4804		NA	Naturally Aspirated	Semi-Automatic	6
21.8706	31.0367	25.2227		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
20.8232	31.7255	24.6324		TC	Turbocharged	Manual	6
17.4935	26.5716	20.6716		NA	Naturally Aspirated	Semi-Automatic	6
16.9415	25.219	19.8774		NA	Naturally Aspirated	Semi-Automatic	6
21.7634	30.1121	24.8658		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
19.278	26.8882	22.0917		TC	Turbocharged	Manual	6
24.2237	32.5108	27.3624		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
21.2839	30.8324	24.7304		TC	Turbocharged	Manual	6
23.7854	31.6043	26.7652		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
23.1009	29.1554	25.4822		NA	Naturally Aspirated	Semi-Automatic	6
24.3944	33.6309	27.8344		NA	Naturally Aspirated	Manual	5
21.8931	32.6043	25.6912		TC	Turbocharged	Manual	6
29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
41.6792	48.86	44.6309		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
28.8556	39.4682	32.8278		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
30.4633	40.2057	34.1916		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
30.8024	42.6219	35.1943		TC	Turbocharged	Manual	6
22.1078	30.6611	25.2814		NA	Naturally Aspirated	Semi-Automatic	6
21.8993	32.1378	25.5642		NA	Naturally Aspirated	Manual	5
19.7174	27.8048	22.6868		NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
20.6233	26.0617	22.7606		TC	Turbocharged	Semi-Automatic	6
18.1488	26.2617	21.0791		TC	Turbocharged	Manual	6
20.402	25.8545	22.5412		TC	Turbocharged	Semi-Automatic	6
19.649	28.9961	22.9829		TC	Turbocharged	Semi-Automatic	8
17.0411	22.7325	19.2048		NA	Naturally Aspirated	Semi-Automatic	8
19.8843	23.7762	21.4655		SC	Supercharged	Semi-Automatic	8

Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Y	omated M	N	Manual with P	paddles) 2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) 2-Wheel D	DAEXV02.00U5N		5	DU	Diesel, ultra low s
N	N	F		2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium
MT	with padd		les) F	2-Wheel D	DAEXV02.03UA	10		GP	Gasoline (F
Y	N	A		All Wheel	IDADXV02.03UA	10		GP	Gasoline (F
Y	N	A		All Wheel	DAEXJ02.0FUB	85	406	GP	Gasoline (Premium
N	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
MT	with padd		les) F	2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	IDADXJ02.03UB	85	406	GP	Gasoline (F
Y	N	A		All Wheel	IDADXV02.03UB	10		GP	Gasoline (F
Y	N	A		All Wheel	IDADXJ02.03UB	85	406	GP	Gasoline (F
N	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
MT	with padd		les) F	2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
combined unrounded unadjusted CO2 value, we calculate 323.8; Error in combined unrounded adjusted CO2 value, w									
Y	N	A		All Wheel	IDADXV03.03UF	10		GP	Gasoline (F
combined unrounded unadjusted CO2 value, we calculate 323.8; Error in combined unrounded adjusted CO2 value, w									
Y	N	A		All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV06.3UA8	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXJ02.0FUB	85	389	GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXT02.04UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXJ02.0FUB	85	447	GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXT02.0HUB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXT03.0TLF	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXT03.03UG		5	DU	Diesel, ultra low s
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.23UL	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.23UL	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
N	N	A		All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
N	N	A		All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium
N	N	A		All Wheel	DAEXV02.53UK	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A		All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	R		2-Wheel D	DBEXV06.84LA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DBCTV08.0V16	10		GPR	Gasoline (Premium

Y	omated	M	Manual with A	paddles)	All Wheel Drive	DV06.5L83	10		GPR	Gasoline (Premium
Y	omated	M	Manual with A	paddles)	All Wheel Drive	DV06.5L83	10		GPR	Gasoline (Premium
Y	omated	M	Manual with A	paddles)	All Wheel Drive	DV05.2LR8	10		GP	Gasoline (Premium
N	N	N	A		All Wheel Drive	DV05.	10		GP	Gasoline (I
Y	omated	M	Manual with A	paddles)	All Wheel Drive	DV05.2LR8	10		GP	Gasoline (Premium
N	N	N	A		All Wheel Drive	DV05.	10		GP	Gasoline (I
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	F		2-Wheel Drive	DV03.6U46	10		GP	Gasoline (Premium
Y	N	N	A		All Wheel Drive	DV03.6U46	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03SA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
N	N	N	A		All Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.0U36	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.0U36	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV01.4PHE	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U4S		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.0U4S		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV03.6U41	10		GP	Gasoline (Premium
Y	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	A		All Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	A		All Wheel Drive	DXT03.02UG		5	DU	Diesel, ultra low s
Y	N	N	A		All Wheel Drive	XT03.6U76	10		GP	Gasoline (Premium
Y	N	N	A		All Wheel Drive	XT03.0HEV	10		GP	Gasoline (Premium

Product Name	Model Year	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MAR	Lead	Rel	per reg	Not exempt	89	20			
MAR	(15 p	on	lemp reg	Not exempt	89	20			
MAR	Lead	Rel	per reg	Not exempt	89	20			
MAR	Lead	Rel	per reg	Not exempt			89	20	
MAR	Lead	Rel	per reg	Not exempt			91	12	
MAR	Lead	Rel	per reg	Not exempt			91	12	
MAR	Lead	Rel	per reg	Not exempt			91	12	
MAR	Lead	Rel	per reg	Not exempt			91	12	
MAR	Lead	Rel	per reg	Not exempt	81	10			
MAR	Lead	Rel	per reg	Not exempt	81	10			
MAR	Lead	Rel	per reg	Not exempt	81	10			
MAR	Lead	Rel	per reg	Not exempt	84	12			
MAR	Lead	Rel	per reg	Not exempt	84	12			
MAR	Lead	Rel	per reg	Not exempt			98	16	
MAR	Lead	Rel	per reg	Not exempt			98	16	
MAR	Lead	Rel	per reg	Not exempt			98	16	
MAR	Lead	Rel	per reg	Not exempt				94	25
MAR	Lead	Rel	per reg	Not exempt			100	15	
MAR	Lead	Rel	per reg	Not exempt			100	15	
MAR	Lead	Rel	per reg	Not exempt			107	15	
MAR	Lead	Rel	per reg	Not exempt			107	15	
MAR	Lead	Rel	per reg	Not exempt			107	15	
MAR	Lead	Rel	per reg	Not exempt			90	28	
MAR	Lead	Rel	per reg	Not exempt			90	28	
MAR	Lead	Rel	per reg	Truck					
MAR	Lead	Rel	per reg	Truck					
MAR	Lead	Rel	per reg	Truck					
MAR	Lead	Rel	per reg	Truck					
MAR	(15 p	on	lemp reg	Truck					
MAR	Lead	Rel	per reg	Not exempt	84	13			
MAR	Lead	Rel	per reg	Not exempt	81	10			
MAR	Lead	Rel	per reg	Not exempt			90	13	
MAR	Lead	Rel	per reg	Not exempt			90	13	
MAR	Lead	Rel	per reg	Not exempt	84	13			
MAR	Lead	Rel	per reg	Not exempt	84	13			
MAR	Lead	Rel	per reg	Not exempt	81	10			
MAR	Lead	Rel	per reg	Not exempt			98	16	
MAR	Lead	Rel	per reg	Not exempt				94	25
MAR	Lead	Rel	per reg	Not exempt			100	15	
MAR	Lead	Rel	per reg	Not exempt	74	13			
MAR	Lead	Rel	per reg	Not exempt				74	13
MAR	Lead	Rel	per reg	Not exempt	102	13			
MAR	Lead	Rel	per reg	Not exempt	89	11			
MAR	Lead	Rel	per reg	Not exempt	89	11			
MAR	Lead	Rel	per reg	Not exempt	86	7			
MAR	Lead	Rel	per reg	Not exempt	86	7			
MAR	Lead	Rel	per reg	Not exempt	86	7			
MAR	Lead	Rel	per reg	Not exempt			100	11	
MAR	Lead	Rel	per reg	Not exempt					



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Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadj
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C	
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre	
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values	
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v	
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unrnd	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and	
2400	2400	corrected unadj unrnd city highway CO2 and then the rounded number is correct. 17.8558	17.8558
2200	2200		
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2400	2400	corrected 14 20 16	17.8558
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2400	2400	corrected 14 20 16	17.8558
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched	
2600	2600		
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes	
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to	
2700	2700	S/S set to yes	
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrnd city CO2 value corrected, S	
3000	3000	S/S set to yes	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c	
2500	2500	14 18 15	17.1
2500	2500	corrected unadj unrounded highway and combined values	
2500	2500	14 19 16	17.4
2200	2200		
3150	3150	CO2 corrections, again Aug 14th, Aug 23 CO2 rounding....adjusted whole CO2 from unadj	
2600	2600	CO2 corrections, additional fuel costs in saving field, corrected Aug 14th	
3150	3150	CO2 corrections	
3150	3150	corrected city CO2 value, typo	
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected city unadj unrounded CO2 , Aug 14th	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected unadj and adj CO2 values, Aug 14th	
2850	2850	CO2 corrections	
2850	2850	CO2 corrections	
3000	3000		
2200	2200	CO2 corrections, Aug 14th correction	
2200	2200	CO2 corrections, Aug 14th	
2850	2850		
4050	4050	corrected unadj unrnd combined CO2 value Aug 14th	9.5
3150	3150		
4050	4050	correct adj unrounded 14 and rounded 16 comb CO2 values Aug 14th	10.3
3350	3350		
4050	4050	corrected Comb adj unrnd CO2 10	9.5
4050	4050	CO2 rounding correction Aug 23 10	10.3
4400	4400		
5700	5700	corrected lock out to "yes" and AMS.	

4400 4400lock up to YES., CO2 corrections Aug 14, S/S set to yes, CO2 rounding correction Aug 23rd  
 4750 4750adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes  
 3550 3550corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug14th  
 3800 3800CO2 rounding correction Aug 23rd  
 3550 3550corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
 4050 4050CO2 rounding Aug 23rd then again on Aug 27  
 1800 1800CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
 2300 2300CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
 1800 1800corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400corrected CO2 values, corrected fuel cost over 5 years  
 2150 2150early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
 2150 2150corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
 2400 2400annual fuel cost corrected, post release 10 amd AMS used, corrected highway value from 28 t  
 1800 1800corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400CO2 corrections, fuel spending corrected to \$400  
 2300 2300corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
 2300 2300adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
 2300 2300EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
 2700 2700update after Verify release 10  
 2850 2850UPDATE after Verify release 10  
 2300 2300CO2 corrections  
 1700 1700corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 1700 1700corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th, CO2 rounding co  
 2050 2050early label, update after Verify release 10, CO2 corrections  
 2050 2050update after Verify release 10 issued, CO2 comb correction  
 2600 2600CO2 corrections, CO2 rounding corrections Aug 20th  
 2100 2100CO2 corrections  
 2300 2300early label, upate after Verify release 10  
 2100 2100corrected unadjusted unrounded CO2 highway and conbined values and combined adjusted w  
 1700 1700corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 2150 2150corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
 1900 1900FE and GHG ratings corrected to 7  
 2200 2200CO2 corrections  
 1700 1700corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th, CO2 rounding co  
 2050 2050early label, update after Verify release 10, CO2 corrections  
 2050 2050update after Verify release 10 issued,CO2 corrections  
 1250 1250GHG rating corrected to 10  
 1750 1750CO2 corrections; inhouse dervied 5-cycle formula corrected Aug 15th  
 1700 1700corrected CO2 values; CO2 correction inhouse formula Aug 15th, CO2 rounding corrections A  
 2050 2050early label, update after Verify release 10, CO2 corrections  
 2050 2050update after Verify release 10 issued, CO2 corrections  
 1700 1700  
 1650 1650  
 2150 2150CO2 corrections  
 2050 2050CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
 2500 2500CO2 correction  
 2500 2500corrected CO2 values, CO2 rounding corrections Aug 20th, rounding Aug 23rd  
 2700 2700CO2 corrections, CO2 rounding corrections Aug 20th  
 2500 2500CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections, CO2 rounding c  
 2500 2500CO2 corrections  
 3000 3000CO2 correction Aug 15th, CO2 rounding corrections Aug 20th  
 2700 2700CO2 corrections

Highway Fuel Economy (EPA) Alternative Fuel  
 Hwy2 Unit Comb2 Unit Hwy2 Unit Hwy2 Unit Comb2 Unit Range2 - Fuel2 Use Fuel2 Use Fuel2 Unit Fuel2 Unit

O2  
 ction Aug 20th

alue  
 ded CO2 value again, second time Aug 14th  
 gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per gallon
---------	---------	---------	---------	--------	-----	---	---------------	-----	------------------

gallons per 100 value...these values were switched  
 28.7473 21.5258 14.1043 20.4969 16.407 270 E Ethanol (E85) MPG miles per g  
 gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per g
---------	---------	---------	---------	--------	-----	---	---------------	-----	-------------

yes

/S set to yes

sumption to 6.2 per ASTM rounding procedure  
 ity and highway CO2 values

25.6	20.1038	13.5432	18.3117	15.3409	253	E	Ethanol (E85)	MPG	miles per gallon
------	---------	---------	---------	---------	-----	---	---------------	-----	------------------

27.1	20.7407	13.7947	19.3602	15.8444	314	E	Ethanol (E85)	MPG	miles per gallon
------	---------	---------	---------	---------	-----	---	---------------	-----	------------------

d weighted values not CO2 to tenths value that is imputed into Verify.

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	--------	-----	---	---------------	-----	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)	MPG	miles per gallon
------	--------	--------	---------	---------	-----	---	---------------	-----	------------------

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	--------	-----	---	---------------	-----	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)	MPG	miles per gallon
------	--------	--------	---------	---------	-----	---	---------------	-----	------------------

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

roup, CO2 rounding Aug 23rd  
nrounded highway and combined CO2 values  
o 29 MPG

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

ed MPG value  
nd corresponding 5-cycle values  
cted calculated values

ction Aug 20th  
rrections Aug 20th

hole CO2 value  
ction Aug 20th

rrections Aug 20th

ug 20th

orrections Aug 20th, CO2 rounding Aug 23rd

Relative Fuel	CO2	CO2	CO2	CO2	Fuel2 EPA	Intake Val	Exhaust V	Carline CI	Carline CI
2012 Ann City	CO2	CO2	CO2	CO2	Fuel2 EPA	Intake Val	Exhaust V	Carline CI	Carline CI
					SIDI;	2	27	Small Station Wag	
						2	27	Small Station Wag	
					SIDI;	2	27	Small Station Wag	
					SIDI;	2	27	Small Station Wag	
					SIDI;	2	24	Compact C	
					SIDI;	2	24	Compact C	
2900	439	302	377	2900	SIDI; FFV;	2	24	Compact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
2900	439	302	377	2900	SIDI; FFV;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
2900	439	302	377	2900	SIDI; FFV;	2	23	Subcompa	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI; Unde	2	25	Midsize Ca	
					SIDI;	2	25	Midsize Ca	
					SIDI; Unde	2	26	Large Cars	
					SIDI;	2	26	Large Cars	
					SIDI;	2	26	Large Cars	
					SIDI;	2	27	Small Station Wag	
3100	458	338	404	3100	SIDI; FFV;	2	27	Small Station Wag	
					SIDI;	2	231	Small SUV 4WD	
2900	450	320	392	2900	SIDI; FFV;	2	231	Small SUV 4WD	
					SIDI;	2	231	Small SUV 4WD	
					SIDI;	2	233	Standard SUV 4W	
						2	233	Standard SUV 4W	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	21	Two Seaters	
					SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	25	Midsize Cars	
					SIDI;	2	24	Compact Cars	
4650	794	469	648	4650	FFV;	2	24	Compact Cars	
					SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	23	Subcompact Cars	
						1	15	Midsize Cars	
						2	21	Two Seaters	

	2	21	Two Seaters
	2	21	Two Seaters
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	1	14	Compact Cars
	1	14	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
SIDI;	2	25	Midsize Cars
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
cars	Derived 5-cycle label	6/22/2012	12265	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12092	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Derived 5-cycle label	8/28/2012	12549	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12093	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Derived 5-cycle label	8/28/2012	12551	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Derived 5-cycle label	8/28/2012	12550	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/21/2012	12228	N	N	
car	Vehicle Specific 5-cycle	6/22/2012	12229	N	N	el economy label values on. Previous values were XX MPG city, XX MPG highway, and XX MPG combined.
car	Vehicle Specific 5-cycle	8/15/2012	12227	N	N	el economy label values on. Previous values were XX MPG city, XX MPG highway, and XX MPG combined.
car	Vehicle Specific 5-cycle	6/22/2012	12230	N	N	el economy label values on. Previous values were XX MPG city, XX MPG highway, and XX MPG combined.
car	Vehicle Specific 5-cycle	8/15/2012	12226	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
cars	Derived 5-cycle label	4/26/2012	11490	N	N	
cars	Derived 5-cycle label	8/27/2012	12479	N	N	
	Vehicle Specific 5-cycle	7/13/2012	11319	N	N	
	Derived 5-cycle label	9/10/2012	12595	N	N	
	Vehicle Specific 5-cycle	9/28/2012	12158	N	N	
D	Derived 5-cycle label	6/11/2012	12437	N	N	
D	Vehicle Specific 5-cycle	7/16/2012	12105	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11510	N	N	
car	Vehicle Specific 5-cycle	7/13/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12106	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12108	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12111	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	8/27/2012	12122	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12115	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12113	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12116	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12119	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12117	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12440	N	N	
car	Vehicle Specific 5-cycle	8/20/2012	12211	N	N	
car	Vehicle Specific 5-cycle	7/27/2012	11087	N	N	



car	Vehicle Specific 5-cycle	4/15/2012	12441	N	N
car	Vehicle Specific 5-cycle	1/14/2013	12234	N	N
car	Vehicle Specific 5-cycle	6/11/2012	12128	N	N
car	Vehicle Specific 5-cycle	6/20/2012	12442	N	N
car	Vehicle Specific 5-cycle	6/21/2012	12130	N	N
car	Vehicle Specific 5-cycle	6/20/2012	12466	N	N
car	Derived 5-cycle label	7/19/2012	12135	N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187	N	N
car	Derived 5-cycle label	6/25/2012	12272	N	N
car	Vehicle Specific 5-cycle	7/12/2012	12271	N	N
car	Vehicle Specific 5-cycle	7/30/2012	12435	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373	N	N
car	Derived 5-cycle label	7/30/2012	10277	N	N
car	Derived 5-cycle label	6/25/2012	12273	N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287	N	N
car	Vehicle Specific 5-cycle	1/16/2012	10186	N	N
car	Vehicle Specific 5-cycle	1/25/2012	11044	N	N
car	Vehicle Specific 5-cycle	1/16/2012	10532	N	N
car	Vehicle Specific 5-cycle	1/16/2012	10534	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527	N	N
car	Derived 5-cycle label	6/22/2012	12264	N	N
car	Derived 5-cycle label	6/25/2012	12268	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529	N	N
car	Vehicle Specific 5-cycle	6/11/2012	12277	N	N
car	Vehicle Specific 5-cycle	4/6/2012	11531	N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531	N	N
car	Vehicle Specific 5-cycle	4/8/2012	11372	N	N
car	Derived 5-cycle label	6/22/2012	12263	N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219	N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300	N	N
car	Vehicle Specific 5-cycle	4/6/2012	11532	N	N
car	Derived 5-cycle label	6/25/2012	12267	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535	N	N
car	Vehicle Specific 5-cycle	1/19/2012	12434	N	N
cars	Derived 5-cycle label	6/25/2012	12151	N	N
cars	Derived 5-cycle label	6/25/2012	12266	N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11534	N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11536	N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158	N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163	N	N
car	Vehicle Specific 5-cycle	6/23/2012	11539	N	N
car	Vehicle Specific 5-cycle	6/23/2012	11547	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554	N	N
	Derived 5-cycle label	6/18/2012	12432	N	N
	Vehicle Specific 5-cycle	6/11/2012	12276	N	N
	Derived 5-cycle label	6/11/2012	12431	N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563	N	N
D	Derived 5-cycle label	6/25/2012	12278	N	N
D	Derived 5-cycle label	6/25/2012	11559	N	N

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N	N	Y	ELECTRONICALLY CONTROLLED INLET/EXHAUST VALVE	Y	INLET/EXHAUST VALVE	
N	N	Y	ELECTRONICALLY CONTROLLED INLET/EXHAUST VALVE	Y	INLET/EXHAUST VALVE	
N	N	ENGINE CODE CEH (GALLARDO COUPE AND SPYDER)	INLET/EXHAUST VALVE	Y	INLET/EXHAUST VALVE	
N	N	ENGINE CN	Y	INLET ANIN	Y	INLET ANIN
N	N	ENGINE CODE CEH (GALLARDO COUPE AND SPYDER)	INLET/EXHAUST VALVE	Y	INLET/EXHAUST VALVE	
N	N	ENGINE CN	Y	INLET ANIN	Y	INLET ANIN
N	N	N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	CONTINUOUS VARIABLE VALVE TIMING	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	N	N	N	N	N
N	N	N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N	N	N
N	N	N	N	N	N	N
N	N	N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	MECHANICAL HYDRAULIC VVT SYSTEM (INLET/EXHAUST)	Y	MECHANICAL HYDRAULIC VVT SYSTEM (INLET/EXHAUST)
N	N	N	N	N	N	N
N	N	N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	SCR Equipped	N	N	N	N
N	N	SCR Equipped	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	Electronic Control / Hydraulic adjustment	Y	Electronic Control / Hydraulic adjustment
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N	N	N
N	N	N	Y	INTAKE / EXHAUST CAM TIMING ADJUSTED HYDRAU	Y	INTAKE / EXHAUST CAM TIMING ADJUSTED HYDRAU
N	N	V6 CYLINDER 2 BANK SYSTEM	Y	MECHANICAL HYDRAULIC VVT SYSTEM (INLET/EXHAUST)	Y	MECHANICAL HYDRAULIC VVT SYSTEM (INLET/EXHAUST)

in Test case for both of them (All values are signed) in the injection and digitalization of digital data. Total effective value is

1 Lithium ion

266

5

### 37 On-Board

## STATEMENT

MECHANICAL-HYDRAULIC

in Test Case for Life Series (All values are signed) in binary notation and (if required) in decimal notation. Total effective number of

MECHANICAL-HYDRAULIC

**in Test for survival time for mice (All values are standard error) in free injection animals (not given in O.S.) (in mice) Total difference was 10 fold**

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

aust valves on a single camshaft. No change in valve overlaps.

Fig. 1. A. L. Ilyin, D. A. Bulgatti GT.

CONTINUOUSLY VVT  
CONTINUOUSLY VVT  
ECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
ECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC  
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controlled and hydraulically adjusted

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YDRAULIC  
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controlled and hydraulically adjusted

controlled and hydraulically adjusted

YDRAULIC  
YDRAULIC  
ND OUTLET CAMS 1 Lithium Ion 220 5 27 On-Board

YDRAULIC  
YDRAULIC

YDRAULIC  
YDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

LICALLY AND CONTROLLED ELECTRONICALLY  
AMS 1 NiMH 288 6 21.5 On-Board

es(2)ained od gear at this loer, FGTgred tterethylin4AC, hragls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km  
 es(2)ained od gear at this loer, FGTgred tterethylin4AC, hragls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical Regen Brake	Both	Y	1AC Induction
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es(2)ained od gear at this loer, FGTgred tterethylin4AC, hragls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km  
 es(2)ained od gear at this loer, FGTgred tterethylin4AC, hragls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km  
 es(2)ained od gear at this loer, FGTgred tterethylin4AC, hragls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ained od gear at this loer, FGTgred tterethylin4AC, hragls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km  
 es(2)ained od gear at this loer, FGTgred tterethylin4AC, hragls ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical BRAKE PEDAL TRIGGERED REGENERATIVE

1Other

Other BRAKE PEDAL TRIGGERED REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM 1Other

Motor	Ger	Rated Mot	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Cell V	Off Board	Camless V	Oil Viscosi
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					CRDI	Common Rail	Direct Diesel Injection	N		5W40
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40
					GDI	Spark Ignit		N		5W40 VW
					GDI	Spark Ignit		N		5W40 VW
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignit		N		5W40 VW
					GDI	Spark Ignit		N		5W40 VW
					GDI	Spark Ignit		N		5W40 VW
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignit		N		5W40 VW
h					GDI	Spark Ignit		N		5W30 VW
					GDI	Spark Ignit		N		5W40 VW
h					GDI	Spark Ignition	Direct Injection	N		5W30 VW 50400 /
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignit	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					CRDI	Common Rail	Direct Diesel Injection	N		5W30 VW 50700
					GDI	Spark Ignition	Direct Injection	N		5W30 VW 50400 /
					GDI	Spark Ignition	Direct Injection	N		5W30 VW 50400 /
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
					GDI	Spark Ignition	Direct Injection	N		5W40 VW 50200
h					GDI	Spark Ignition	Direct Injection	N		5W30 VW 50400 /
h					GDI	Spark Ignition	Direct Injection	N		5W30 VW 50400 /
h					GDI	Spark Ignition	Direct Injection	N		5W30 VW 50400 /
					GDI	Spark Ignit	Direct Injection	N		5W40
					GDI	Spark Ignit	Direct Injection	N		5W40
					GDI	Spark Ignit	Direct Injection	N		5W40 VW 50200
					MFI	Multipoint	Sequential fuel inject	N		5W30 VW 504 00
h					GDI	Spark Ignition	Direct Injection	N		5W30 VW 50400 /
					MFI	Multipoint	Sequential fuel inject	N		5W30 VW 504 00
h					GDI	Spark Ignition	Direct Injection	N		5W30 VW 50400 /
					MFI	Multipoint	Sequential fuel inject	N		5W30 VW 504 00
					MFI	Multipoint	Sequential fuel inject	N		5W30 VW 504 00
					MFI	Multipoint	Sequential fuel inject	N		0W40 / VW50200
					MFI	Multipoint	Sequential fuel inject	N		10W60 VW 50101

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	MFI	Multipoint/sequential fuel injection	No	5W30 VW 50400 /
	MFI	Multipoint/sequential fuel injection	No	5W30 VW 50400 /
	GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
	GDI	Spark Ignit	N	10W60 VW
	GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
	GDI	Spark Ignit	N	10W60 VW
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
	GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
	GDI	Spark Ignition Direct Injection	N	5W40 / VW50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	MFI	Multipoint/sequential fuel injection	No	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	No	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
3 PHASE PERMANENT MAGNET	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	CRDI	Common Rail Direct Diesel Injection	No	5W40 VW 50501
	CRDI	Common Rail Direct Diesel Injection	No	5W40 VW 50501
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W30 VW 50700
3 PHASE CURRENT PERM. MAGNET	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200

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50700	Yes	Auto(AM-S7)	Auto(AM-S7)
50700	Yes	Auto(AM-S7)	Auto(AM-S7)
50500	No	Auto(AM-S6)	Auto(AM-S6)
50500	No	Manual(M6)	Manual(M6) Gallardo C
50500	No	Auto(AM-S6)	Auto(AM-S6)
50500	No	Manual(M6)	Manual(M6) Gallardo S
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6)
	No	Manual(M6)	Manual(M6)
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6)
	No	Manual(M6)	Manual(M6)
	No	Auto(S6)	Auto(S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6) C M6
	No	Auto(S6)	Auto(S6)
	No	Auto(S6)	Auto(S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6) Jetta SportWagen M6
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Manual(M6)	Manual(M6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(S6)	Auto(S6) Jetta Base
	No	Manual(M5)	Manual(M5)
	No	Manual(M6)	Manual(M6)
	No	Manual(M6)	Manual(M6) Jetta SportWagen M6
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Auto(AM-S7)	Auto(AM-S7)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6) Jetta SportWagen M6
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6)
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(S6)	Auto(S6) Tiguan front
	No	Manual(M6)	Manual(M6)
	No	Auto(S6)	Auto(S6)
	No	Auto(S8)	Auto(S8)
	No	Auto(S8)	Auto(S8)
	No	Auto(S8)	Auto(S8) Touareg Hybrid

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16.4		2	2 DNLXV06.5L83	5
14.5		1	1 DNLXV06.5L83	5
19.4		3	3 DAD XV05.2LR8	5
17.4		3	3 DAD XV05.	5
19.3		3	3 DAD XV05.2LR8	5
16.1		2	2 DAD XV05.	5
43.7		8	7 DVWXV02.0U5N	5
31.8		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
31.6		6	6 DVWXV02.5A59	7
31.9		6	6 DVWXV02.5M59	7
31.5		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
30.3		6	6 DVWXV02.5A59	7
32.3		6	6 DVWXV02.03PA	7
31.8		6	6 DVWXV02.03PA	7
25.8		5	5 DVWXV03.6U46	5
24.8		5	5 DVWXV03.6U46	5
32.4		6	6 DVWXV02.03SA	5
46.2		9	8 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
28.5		5	5 DAD XV02.03UA	5
34.8		7	7 DAD XV02.03PA	7
31.2		6	6 DAD XV02.03PA	7
35		7	7 DVWXV02.03PA	7
46.2		9	8 DVWXV02.0U5N	5
32.9		6	6 DVWXV02.0U36	5
34.7		7	7 DVWXV02.0U36	5
32.6		7	7 DVWXV02.03PA	7
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
60.9		10	10 DVWXV01.4PHE	7
44.2		8	7 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
44.6		9	8 DVWXV02.0U4S	5
46.4		9	8 DVWXV02.0U4S	5
31.9		6	6 DVWXV02.5A59	7
31.7		7	7 DVWXV02.5M59	7
28.5		6	6 DVWXV03.6U41	5
29.9		6	6 DVWXJ02.03UA	5
26.4		5	5 DVWXJ02.03UA	5
29.6		6	6 DVWXJ02.03UA	5
23.3		6	5 DAD XT03.02UG	5
25		4	4 DVWXT03.6U76	5
28.2		5	5 DVWXT03.0HEV	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DADXV02.03UA 5

DADXV02.03UA 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

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	10400	836	481	676
	12150	902	547	742
	6150	657	447	562
	7400	734	511	634
	6150	660	446	564
	8650	768	452	626
2600		354	262	313
100		401	291	351
2600		365	250	313
	400	430	298	371
850		396	310	358
850		408	289	354
	400	421	310	371
2600		365	250	313
	400	430	298	371
100		418	329	378
100		403	283	349
100		425	279	360
	1900	507	334	429
	2650	523	351	446
100		405	257	338
3100		340	245	297
3100		342	243	297
1350		374	286	334
1350		388	271	335
	1400	460	330	401
1100		379	271	331
100		416	287	358
1100		372	280	331
3100		340	245	297
850		381	299	344
2100		361	262	316
600		403	272	344
3100		342	243	297
1350		374	286	334
1350		388	271	335
5350		211	182	198
2850		352	258	310
3100		342	243	297
1350		374	286	334
1350		388	271	335
3100		331	240	290
3350		330	239	289
850		401	289	351
1350		391	275	339
	900	449	319	390
	900	430	341	390
	1900	484	336	417
	900	435	343	394
	900	517	351	442
	3400	520	391	462
	1900	447	372	413

Model	2014 EPA City	2014 EPA Hwy	2014 EPA Comb	2014 EPA CO2	2014 EPA CO2e	2014 EPA CO2e
333	232	287.6	431.8	318.9	381	
259.8	171.2	219.9	339.8	244.6	297	
350	220	291.5	442.5	295.6	376.4	
325	239	286.3	442	316	385.3	
293.8	199.8	251.5	373.3	303.6	341.9	
345.7	218.7	288.6	436.9	296.8	373.9	
343.9	218.5	287.5	434.9	306.5	377.1	
320.4	202.1	267.2	397.1	276.4	342.8	
293.8	199.8	251.5	373.3	303.6	341.9	
345.7	218.7	288.6	436.9	296.8	373.9	
343.9	218.5	287.5	434.9	306.5	377.1	
345.7	218.7	288.6	436.9	296.8	373.9	
343.9	218.5	287.5	434.9	306.5	377.1	
320.4	202.1	267.2	397.1	276.4	342.8	
282	189	240.2	360	272	320.4	
345.7	218.7	288.6	436.9	296.8	373.9	
383.5	233	315.8	481.7	326	411.6	
393.5	238.7	323.8	498	320.9	418.3	
393.5	238.7	323.9	498	320.9	418.4	
409.5	232	329.6	515.1	313.1	424.2	
393.5	238.7	323.9	498	320.9	418.4	
447.5	262	364	554.1	344.7	459.9	
559	346	463.2	675	430	564.8	
352	238	300.7	444	333	394	
352	238	300.7	444.5	332.7	394.2	
358	230	300.4	449.6	314.3	388.7	
358	230	300.4	451.6	321.9	393.2	
380	223	309.4	368.9	298.5	337.2	
460.9	296.5	386.9	573.1	411.5	500.4	
446	260	362.3	541	369	463.6	
466	296	389.5	562.3	379.3	480	
463	307	392.8	558	398	486	
396	248	329.4	488	321	412.8	
443	266	363.4	440.6	355	402.1	
396	248	329.4	488	321	412.8	
443	266	363.4	440.6	355	402.1	
401	256	335.8	500.4	340.8	428.6	
427.3	251.6	348.2	530.4	329.7	440.1	
427.3	251.6	348.2	530.4	329.7	440.1	
468	267	377.6	580.3	347.3	475.4	
312.2	209.9	266.2	394.5	284.4	345	
312.2	209.9	266.2	394.5	284.4	345	
419	259	347	498.9	350.4	432.1	
649	361	519.4	787	474	646.2	
466	265	375.6	590	364	488.3	
639	359	513	768	469	633.4	
510	288	410.1	638	370	517.4	
649	361	519.4	787	474	646.2	
639	359	513	768	469	633.4	
690	408	563.1	840.4	501	687.7	
885	495	709.5	1050.2	598.8	847.1	

705	353	546.6	836	481	676.2
771	418	612.2	902	547	742.2
552	349	460.6	657	447	562.5
635	370	515.8	734	511	633.6
556	348	462.4	660	446	563.7
681	391	550.5	768	452	625.8
272	184	232.4	354.3	261.8	312.7
334.3	211.2	278.9	401	290.6	351.3
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
323.7	227.6	280.5	396.3	310.3	357.6
335.2	207.2	277.6	407.6	288.8	354.1
332	220.9	282	421	310	371
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
335.4	235.6	290.5	418.2	329.4	378.2
327.2	207.7	273.4	402.8	282.7	348.8
346.3	202.5	281.6	425.2	279.3	359.5
419	253	344.3	506.7	333.8	428.9
434	265	358	523	351.1	445.6
321	213	272.4	404.7	256.6	338.1
259.8	171.2	219.9	339.8	244.6	297
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
372	240	312.6	459.5	330.5	401.4
295.1	203.2	253.7	379.2	271.3	330.6
340.4	215.5	284.2	415.9	287	357.9
300.9	196.7	254	372	280.4	330.8
259.8	171.2	219.9	339.8	244.6	297
315	214	269.6	381.3	298.8	344.2
307	192	255.2	360.5	262	316.2
333.9	197.2	272.4	403.3	271.8	344.1
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
155	134	145.6	211	182	198
270	181	230	351.9	257.7	309.5
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
268	179	228	331	240	290
266	162	219.2	330	239	289
328.2	217.8	278.5	400.9	289.4	350.7
339.6	206.8	279.8	391.3	275	339
372	238	311.7	449	319	390.5
339.6	244.4	296.8	429.9	341.3	390
407	248	335.4	484	336	417.4
343.6	246	299.7	434.6	343.5	393.6
422	248	343.7	517	351	442.3
416	281	355.2	520.1	390.6	461.8
354	267	314.8	446.9	371.8	413.1

City	Distance to nearest 40 miles	Distance	Comb Vol Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT
N		4.2		4.2			
N		2.9		2.9			
N		4.2		4.2			
N		4.2		4.2			
N		3.8		3.8			
N		4.2		4.2			
N		4.2		4.2			
N		3.8		3.8			
N		3.8		3.8			
N		4.2		4.2			
N		4.2		4.2			
N		4.2		4.2			
N		3.8		3.8			
N		3.6		3.6			
N		4.2		4.2			
N		4.5		4.5			
N		4.8		4.8			
N		4.8		4.8			
N		4.8		4.8			
N		5.3		5.3			
N		6.2		6.2			
N		4.3		4.3			
N		4.3		4.3			
N		4.3		4.3			
N		4.3		4.3			
N		3.8		3.8			
N		5.6		5.6			
N		4.5		4.5			
N		5.6		5.6			
N		5.6		5.6			
N		4.8		4.8			
N		5		5			
N		4.8		4.8			
N		5		5			
N		4.8		4.8			
N		5		5			
N		5		5			
N		5.3		5.3			
N		3.8		3.8			
N		3.8		3.8			
N		5		5			
N		7.1		7.1			
N		5.6		5.6			
N		7.1		7.1			
N		5.9		5.9			
N		7.1		7.1			
N		7.1		7.1			
N		7.7		7.7			
N		10		10			

N	7.7	7.7
N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.2	2.2
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8





[illegible]



[illegible]

mined)

















**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com; CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/20/2012 5:56:04 PM  
**Subject:** re: 2013 FE Guide - Minors Errors to correct in Verify; correcting them will save my review time (every time I run the FE Guide query)  
[VW\\_Group\\_2013\\_FEGuide-all\\_rel\\_dates-no-sales-9-17-2012.xlsx](#)

Richard,

Enclosed are the data in EPA's Verify data base as of September 17, 2012.

Please correct the errors in the Indexes which are highlighted in green fill in the first few columns. While these errors are minor and did not hold up posting the data on [www.fueleconomy.gov](http://www.fueleconomy.gov), they will save me a few minutes of my review time each time I run the 2013 FE Guide query (every two weeks or more frequently).

Thanks

EPA comr	VERIFY cc	Model Yr (Mfr Name	Division (C	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013 Audi	Audi	A3	ADX	59	2.0 4
Diesel;		2013 Audi	Audi	A3	ADX	73	2.0 4
		2013 Audi	Audi	A3	ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013 Audi	Audi	A4	ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	102	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet quattro	ADX	39	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	104	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	103	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013 Audi	Audi	A6	ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro	ADX	76	3.0 6
OK for wet Y		2013 Audi	Audi	A8	ADX	128	3.0 6
		2013 Audi	Audi	A8	ADX	98	4.0 8
OK for wet Y		2013 Audi	Audi	A8L	ADX	129	3.0 6
		2013 Audi	Audi	A8L	ADX	97	4.0 8
		2013 Audi	Audi	A8L	ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013 Audi	Audi	allroad quattro	ADX	101	2.0 4
		2013 Audi	Audi	Q5	ADX	91	2.0 4
		2013 Audi	Audi	Q5	ADX	105	2.0 4
Hybrid;		2013 Audi	Audi	Q5 Hybrid	ADX	95	2.0 4
		2013 Audi	Audi	Q7	ADX	61	3.0 6
Diesel;		2013 Audi	Audi	Q7	ADX	53	3.0 6
		2013 Audi	Audi	RS5	ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
		2013 Audi	Audi	S4	ADX	42	3.0 6
		2013 Audi	Audi	S4	ADX	45	3.0 6
		2013 Audi	Audi	S5	ADX	43	3.0 6
		2013 Audi	Audi	S5	ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013 Audi	Audi	S6	ADX	48	4.0 8
		2013 Audi	Audi	S7	ADX	47	4.0 8
		2013 Audi	Audi	S8	ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe quattro	ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster quattro	ADX	67	2.0 4
		2013 Audi	Audi	TTRS Coupe	ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental BEK	ing Spur	110	6.0 12
		2013 Bentley	Bentley Motors	Continental BEK		108	4.0 8
		2013 Bentley	Bentley Motors	Continental BEK		113	6.0 12
		2013 Bentley	Bentley Motors	Continental BEK	TC	107	4.0 8
		2013 Bentley	Bentley Motors	Continental BEK	TC	111	6.0 12
		2013 Bentley	Bentley Motors	Continental BEK	persports Con	112	6.0 12
		2013 Bentley	Bentley Motors	Mulsanne	BEK	96	6.8 8
		2013 Bugatti	Bugatti	Veyron	BGT	88	8.0 16

	2013	Lamborghini	Lamborghini	Aventador Coupe	92	6.5	12
	2013	Lamborghini	Lamborghini	Aventador Roadster	93	6.5	12
	2013	Lamborghini	Lamborghini	Gallardo Coupe	30	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo CNLX	32	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo Spyder	31	5.2	10
	2013	Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel;	2013	Volkswagen	Volkswagen	BEETLE VWX	94	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	19	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE VWX	84	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	89	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE VWX	17	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE VWX	27	2.5	5
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	20	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	85	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	90	2.0	4
	2013	Volkswagen	Volkswagen	BEETLE CONVERTIBLE	18	2.5	5
	2013	Volkswagen	Volkswagen	6C VWX	1	2.0	4
	2013	Volkswagen	Volkswagen	6C VWX	4	2.0	4
	2013	Volkswagen	Volkswagen	6C VWX	2	3.6	6
	2013	Volkswagen	Volkswagen	6C 4MOTION VWX	3	3.6	6
	2013	Volkswagen	Volkswagen	Eos VWX	21	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF VWX	72	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	GOLF VWX	81	2.0	4
	2013	Volkswagen	Volkswagen	GOLF VWX	16	2.5	5
	2013	Volkswagen	Volkswagen	GOLF VWX	26	2.5	5
	2013	Volkswagen	Volkswagen	Golf R VWX	57	2.0	4
	2013	Volkswagen	Volkswagen	GTI VWX	22	2.0	4
	2013	Volkswagen	Volkswagen	GTI VWX	23	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	50	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta VWX	71	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	86	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	87	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	51	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Jetta VWX	80	2.0	4
	2013	Volkswagen	Volkswagen	Jetta VWX	15	2.5	5
	2013	Volkswagen	Volkswagen	Jetta VWX	25	2.5	5
Hybrid;	2013	Volkswagen	Volkswagen	Jetta Hybrid VWX	100	1.4	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	74	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	79	2.0	4
	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	14	2.5	5
	2013	Volkswagen	Volkswagen	JETTA SPORT WAGEN	24	2.5	5
Diesel;	2013	Volkswagen	Volkswagen	Passat VWX	62	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Passat VWX	64	2.0	4
	2013	Volkswagen	Volkswagen	Passat VWX	83	2.5	5
	2013	Volkswagen	Volkswagen	Passat VWX	82	2.5	5
	2013	Volkswagen	Volkswagen	Passat VWX	63	3.6	6
	2013	Volkswagen	Volkswagen	TIGUAN VWX	68	2.0	4
	2013	Volkswagen	Volkswagen	TIGUAN VWX	56	2.0	4
	2013	Volkswagen	Volkswagen	TIGUAN 4MOTION	55	2.0	4
Diesel;	2013	Volkswagen	Volkswagen	Touareg VWX	54	3.0	6
	2013	Volkswagen	Volkswagen	Touareg VWX	78	3.6	6
Hybrid;	2013	Volkswagen	Volkswagen	Touareg Hybrid	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S6)	21	28	24				26.6	38.2	30.8102
Auto(AM-S6)	30	42	34				39.0935	59.3437	46.1856
Manual(M6)	21	30	24				25.3	40.3	30.3902
Auto(AM-S6)	21	28	24				27.2	37.1	30.9119
Auto(AV-Si	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	24	30	26				30.4	39.9	34.048
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S7)	16	23	18				19.1	30	22.8332
Auto(AM-S7)	16	22	18				19.2	28.9	22.6159
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	26	21				22.1	34.7	26.4165
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Manual(M6)	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	11	18	13				12.9	21.8	15.8033
Auto(AM-S7)	8	15	10				10	17.9	12.4782

Auto(AM-S7)	11	18	13	12.6	25.2	16.2581
Auto(AM-S7)	10	16	12	11.5	21.2	14.4817
Auto(AM-S6)	13	20	16	16.1	25.4	19.276
Manual(M6)	12	20	15	14	24	17.2308
Auto(AM-S6)	13	20	16	16	25.4	19.197
Manual(M6)	12	20	14	13	22.6	16.0722
Auto(AM-S6)	29	39	32	37.3	55.3	43.7011
Auto(AM-S6)	22	30	25	26.5	42.0656	31.7942
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M5)	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S6)	21	29	24	26.8	40.2092	31.532
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S6)	22	31	25	26.977	42.4936	32.2814
Manual(M6)	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S6)	22	30	25	27.5	41.5	32.4219
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Manual(M6)	19	27	22	23.9	37.1	28.456
Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229
Manual(M6)	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M5)	24	34	28	28.8	46.2	34.6771
Manual(M6)	22	33	26	26.5556	44.9945	32.56
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S7)	42	49	45	57.2	66.2	60.9274
Auto(AM-S6)	29	39	33	37.6	56.2	44.1798
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	30	40	34	37.9	56.8	44.5744
Manual(M6)	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M5)	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S6)	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Model	Fuel	Unrd Comb Unr	Guzzler?	Air Aspir	IAir Aspira	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbocharg	AdS	Automated Manual-	Selectable	(e.g. Au
29.8946	41.5209	34.2046			TC	Turbocharg	AdS	Automated Manual-	Selectable	(e.g. Au
20.8146	29.9953	24.1394			TC	Turbocharg	Ad	Manual		6
20.891	28.1035	23.6187			TC	Turbocharg	AdS	Automated Manual-	Selectable	(e.g. Au
23.6355	30.6684	26.3554			TC	Turbochar	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
20.402	28.949	23.5279			TC	Turbocharg	SA	Semi-Automatic		8
22.2425	32.0861	25.8049			TC	Turbocharg	Ad	Manual		6
23.6355	30.6684	26.3554			TC	Turbocharg	SCV	Selectable Continuously Variable		8 (e.g. C
20.3576	29.8271	23.7508			TC	Turbocharg	SA	Semi-Automatic		8
20.402	28.949	23.5279			TC	Turbochar	SA	Semi-Auto		8
20.3576	29.8271	23.7508			TC	Turbochar	SA	Semi-Auto		8
20.402	28.949	23.5279			TC	Turbochar	SA	Semi-Auto		8
22.2425	32.0861	25.8049			TC	Turbocharg	Ad	Manual		6
24.5044	32.5529	27.5721			TC	Turbocharg	SCV	Selectable Continuously Variable		8 (e.g. C
20.3576	29.8271	23.7508			TC	Turbocharg	SA	Semi-Automatic		8
18.3949	27.2332	21.5408			SC	Supercharg	SA	Semi-Automatic		8
17.8058	27.5484	21.1758			SC	Supercharg	SA	Semi-Automatic		8
00, 314-08(e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in co	17.8058	27.5484	21.1758		SC	Superchar	SA	Semi-Auto		8
17.2616	28.4347	20.9695			TC	Turbochar	SA	Semi-Auto		8
00, 314-08(e)(4) reasons. Please revise release date to the effective date when vehicles were relabelled; Error in co	17.8058	27.5484	21.1758		SC	Superchar	SA	Semi-Auto		8
16.0273	25.8053	19.3219			TC	Turbocharg	SA	Semi-Automatic		8
13.1387	20.6025	15.6978 G			NA	Naturally Aspirated		Semi-Automatic		8
19.9584	26.6824	22.5112			TC	Turbocharg	SA	Semi-Automatic		8
19.9584	26.6824	22.5112			TC	Turbocharg	SA	Semi-Automatic		8
19.7289	28.2351	22.823			TC	Turbocharg	SA	Semi-Automatic		8
19.6619	27.5771	22.5781			TC	Turbocharg	SA	Semi-Automatic		8
24.0075	29.7936	26.3065			TC	Turbocharg	SA	Semi-Automatic		8
15.522	21.5458	17.7559			SC	Supercharg	SA	Semi-Automatic		8
18.74	27.62	21.9099			TC	Turbocharg	SA	Semi-Automatic		8
15.7409	23.3075	18.4339			NA	Naturally Aspirated		Automated Manual-	Selectable	7(e.g. Au
15.8793	22.1836	18.2078			NA	Naturally Aspirated		Automated Manual-	Selectable	7(e.g. Au
18.117	27.558	21.419			SC	Supercharg	AdS	Automated Manual-	Selectable	7(e.g. Au
17.0438	26.023	20.1767			SC	Supercharg	Ad	Manual		6
18.117	27.558	21.419			SC	Supercharg	AdS	Automated Manual-	Selectable	7(e.g. Au
17.0438	26.023	20.1767			SC	Supercharg	Ad	Manual		6
17.6699	25.953	20.6333			SC	Supercharg	AdS	Automated Manual-	Selectable	7(e.g. Au
16.761	26.9697	20.2022			TC	Turbocharg	AdS	Automated Manual-	Selectable	7(e.g. Au
16.761	26.9697	20.2022			TC	Turbocharg	AdS	Automated Manual-	Selectable	7(e.g. Au
15.2801	25.5632	18.6574			TC	Turbocharg	SA	Semi-Automatic		8
22.407	31.1674	25.6515			TC	Turbocharg	AdS	Automated Manual-	Selectable	7(e.g. Au
22.407	31.1674	25.6515			TC	Turbocharg	AdS	Automated Manual-	Selectable	7(e.g. Au
17.751	25.2021	20.4751			TC	Turbocharg	Ad	Manual		6
11.2476	18.7327	13.7134 G			TC	Turbocharg	SA	Semi-Automatic		6
15.0109	24.4645	18.1706			TC	Turbocharg	SA	Semi-Automatic		8
11.5043	18.877	13.9574 G			TC	Turbocharg	SA	Semi-Automatic		6
14.0639	23.9773	17.2766 G			TC	Turbocharg	SA	Semi-Automatic		8
11.2476	18.7327	13.7134 G			TC	Turbocharg	SA	Semi-Automatic		6
11.5043	18.877	13.9574 G			TC	Turbocharg	SA	Semi-Automatic		6
10.5402	17.7129	12.8889 G			TC	Turbocharg	SA	Semi-Automatic		8
8.4232	14.7698	10.4424 G			TC	Turbocharg	AdS	Automated Manual-	Selectable	7(e.g. Au

10.6055	18.4729	13.1199	G	NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
9.7957	16.2453	11.9264	G	NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
13.4655	19.7573	15.718	G	NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
12.0883	19.9831	14.7021	G	NA	Naturally Aspirated	Manual	6
13.3954	19.7741	15.6701	G	NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
11.5388	19.5451	14.1465	G	NA	Naturally Aspirated	Manual	6
28.6469	38.87	32.4925		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
22.0202	29.5574	24.8746		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517		TC	Turbocharged	Manual	6
22.2864	28.5683	24.7338		NA	Naturally Aspirated	Semi-Automatic	6
21.7201	30.6767	25.0054		NA	Naturally Aspirated	Manual	5
21.1383	28.6751	23.9738		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517		TC	Turbocharged	Manual	6
21.2302	26.9749	23.4804		NA	Naturally Aspirated	Semi-Automatic	6
21.8706	31.0367	25.2227		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
20.8232	31.7255	24.6324		TC	Turbocharged	Manual	6
17.4935	26.5716	20.6716		NA	Naturally Aspirated	Semi-Automatic	6
16.9415	25.219	19.8774		NA	Naturally Aspirated	Semi-Automatic	6
21.7634	30.1121	24.8658		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
19.278	26.8882	22.0917		TC	Turbocharged	Manual	6
24.2237	32.5108	27.3624		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
21.2839	30.8324	24.7304		TC	Turbocharged	Manual	6
23.7854	31.6043	26.7652		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
23.1009	29.1554	25.4822		NA	Naturally Aspirated	Semi-Automatic	6
24.3944	33.6309	27.8344		NA	Naturally Aspirated	Manual	5
21.8931	32.6043	25.6912		TC	Turbocharged	Manual	6
29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
41.6792	48.86	44.6309		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
28.8556	39.4682	32.8278		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	Manual	6
23.6446	31.0458	26.486		NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594		NA	Naturally Aspirated	Manual	5
30.4633	40.2057	34.1916		TC	Turbocharged	Automated Manual- Selectable	7 (e.g. Au
30.8024	42.6219	35.1943		TC	Turbocharged	Manual	6
22.1078	30.6611	25.2814		NA	Naturally Aspirated	Semi-Automatic	6
21.8993	32.1378	25.5642		NA	Naturally Aspirated	Manual	5
19.7174	27.8048	22.6868		NA	Naturally Aspirated	Automated Manual- Selectable	7 (e.g. Au
20.6233	26.0617	22.7606		TC	Turbocharged	Semi-Automatic	6
18.1488	26.2617	21.0791		TC	Turbocharged	Manual	6
20.402	25.8545	22.5412		TC	Turbocharged	Semi-Automatic	6
19.649	28.9961	22.9829		TC	Turbocharged	Semi-Automatic	8
17.0411	22.7325	19.2048		NA	Naturally Aspirated	Semi-Automatic	8
19.8843	23.7762	21.4655		SC	Supercharged	Semi-Automatic	8



Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - IFuel	UsagFuel	Usag
Y	omated M	N	Manual with P	paddles) 2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) 2-Wheel D	DAEXV02.00U5N		5	DU	Diesel, ultra low s
N	N	F		2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium
MT with paddles)		F		2-Wheel D	DADAXV02.(	10		GP	Gasoline (F
Y	N	A		All Wheel	IDADAXV02.(	10		GP	Gasoline (F
Y	N	A		All Wheel	DAEXJ02.0FUB	85	406	GP	Gasoline (Premium
N	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
MT with paddles)		F		2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	IDADAXJ02.C	85	406	GP	Gasoline (F
Y	N	A		All Wheel	IDADAXV02.(	10		GP	Gasoline (F
Y	N	A		All Wheel	IDADAXJ02.C	85	406	GP	Gasoline (F
N	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
MT with paddles)		F		2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
combined unrounded unadjusted CO2 value, we calculate 323.8; Error in combined unrounded adjusted CO2 value, w									
Y	N	A		All Wheel	IDADAXV04.(	10		GP	Gasoline (F
combined unrounded unadjusted CO2 value, we calculate 323.8; Error in combined unrounded adjusted CO2 value, w									
Y	N	A		All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV06.3UA8	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXJ02.0FUB	85	389	GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXT02.04UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXJ02.0FUB	85	447	GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXT02.0HUB	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXT03.0TLF	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXT03.03UG		5	DU	Diesel, ultra low s
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.23UL	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.23UL	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
N	N	A		All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
N	N	A		All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium
N	N	A		All Wheel	DAEXV02.53UK	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A		All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A		All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	R		2-Wheel D	DBEXV06.84LA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DBCTV08.0V16	10		GPR	Gasoline (Premium

Y	omated	M	Manual with A	paddles)	All Wheel Drive	DV06.5L83	10		GPR	Gasoline (Premium
Y	omated	M	Manual with A	paddles)	All Wheel Drive	DV06.5L83	10		GPR	Gasoline (Premium
Y	omated	M	Manual with A	paddles)	All Wheel Drive	DV05.2LR8	10		GP	Gasoline (Premium
N	N	N	A		All Wheel Drive	DV05.	10		GP	Gasoline (I
Y	omated	M	Manual with A	paddles)	All Wheel Drive	DV05.2LR8	10		GP	Gasoline (Premium
N	N	N	A		All Wheel Drive	DV05.	10		GP	Gasoline (I
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	F		2-Wheel Drive	DV03.6U46	10		GP	Gasoline (Premium
Y	N	N	A		All Wheel Drive	DV03.6U46	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03SA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
N	N	N	A		All Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.0U36	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.0U36	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV01.4PHE	10		GP	Gasoline (Premium
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.0U5N		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV02.0U4S		5	DU	Diesel, ultra low s
N	N	N	F		2-Wheel Drive	DV02.0U4S		5	DU	Diesel, ultra low s
Y	N	N	F		2-Wheel Drive	DV02.5U3A	10		G	Gasoline (Regular
N	N	N	F		2-Wheel Drive	DV02.5U3M	10		G	Gasoline (Regular
Y	omated	M	Manual with F	paddles)	2-Wheel Drive	DV03.6U41	10		GP	Gasoline (Premium
Y	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
N	N	N	F		2-Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	A		All Wheel Drive	DV02.03UA	10		GP	Gasoline (Premium
Y	N	N	A		All Wheel Drive	DXT03.02UG		5	DU	Diesel, ultra low s
Y	N	N	A		All Wheel Drive	XT03.6U76	10		GP	Gasoline (Premium
Y	N	N	A		All Wheel Drive	XT03.0HEV	10		GP	Gasoline (Premium

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Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadj
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C	
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre	
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values	
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v	
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unrnd	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG value and	
2400	2400	corrected unadj unrnd city highway CO2 and then the rounded number is correct. 17.8558	17.8558
2200	2200		
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2400	2400	corrected 14 20 16	17.8558
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG value and	
2400	2400	corrected 14 20 16	17.8558
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG value and gallons per 100 value...these values were switched	
2600	2600		
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes	
2700	2700	added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to	
2700	2700	S/S set to yes	
2700	2700	added new A7 quattro data to the base level, A8L 3.0L unadj unrnd city CO2 value corrected, S	
3000	3000	S/S set to yes	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c	
2500	2500	14 18 15	17.1
2500	2500	corrected unadj unrounded highway and combined values	
2500	2500	14 19 16	17.4
2200	2200		
3150	3150	CO2 corrections, again Aug 14th, Aug 23 CO2 rounding....adjusted whole CO2 from unadj	
2600	2600	CO2 corrections, additional fuel costs in saving field, corrected Aug 14th	
3150	3150	CO2 corrections	
3150	3150	corrected city CO2 value, typo	
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected city unadj unrounded CO2 , Aug 14th	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected unadj and adj CO2 values, Aug 14th	
2850	2850	CO2 corrections	
2850	2850	CO2 corrections	
3000	3000		
2200	2200	CO2 corrections, Aug 14th correction	
2200	2200	CO2 corrections, Aug 14th	
2850	2850		
4050	4050	corrected unadj unrnd combined CO2 value Aug 14th	9.5
3150	3150		
4050	4050	correct adj unrounded 14 and rounded 16 comb CO2 values Aug 14th	10.3
3350	3350		
4050	4050	corrected Comb adj unrnd CO2 10	9.5
4050	4050	CO2 rounding correction Aug 23 10	10.3
4400	4400		
5700	5700	corrected lock out to "yes" and AMS.	

4400 4400lock up to YES., CO2 corrections Aug 14, S/S set to yes, CO2 rounding correction Aug 23rd  
 4750 4750adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes  
 3550 3550corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug14th  
 3800 3800CO2 rounding correction Aug 23rd  
 3550 3550corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
 4050 4050CO2 rounding Aug 23rd then again on Aug 27  
 1800 1800CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
 2300 2300CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
 1800 1800corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400corrected CO2 values, corrected fuel cost over 5 years  
 2150 2150early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
 2150 2150corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
 2400 2400annual fuel cost corrected, post release 10 amd AMS used, corrected highway value from 28 t  
 1800 1800corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400CO2 corrections, fuel spending corrected to \$400  
 2300 2300corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
 2300 2300adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
 2300 2300EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
 2700 2700update after Verify release 10  
 2850 2850UPDATE after Verify release 10  
 2300 2300CO2 corrections  
 1700 1700corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 1700 1700corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th, CO2 rounding co  
 2050 2050early label, update after Verify release 10, CO2 corrections  
 2050 2050update after Verify release 10 issued, CO2 comb correction  
 2600 2600CO2 corrections, CO2 rounding corrections Aug 20th  
 2100 2100CO2 corrections  
 2300 2300early label, upate after Verify release 10  
 2100 2100corrected unadjusted unrounded CO2 highway and conbined values and combined adjusted w  
 1700 1700corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 2150 2150corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
 1900 1900FE and GHG ratings corrected to 7  
 2200 2200CO2 corrections  
 1700 1700corrected CO2 values; inhouse derived 5-cycle formular corrected Aug 15th, CO2 rounding co  
 2050 2050early label, update after Verify release 10, CO2 corrections  
 2050 2050update after Verify release 10 issued,CO2 corrections  
 1250 1250GHG rating corrected to 10  
 1750 1750CO2 corrections; inhouse dervied 5-cycle formula corrected Aug 15th  
 1700 1700corrected CO2 values; CO2 correction inhouse formula Aug 15th, CO2 rounding corrections A  
 2050 2050early label, update after Verify release 10, CO2 corrections  
 2050 2050update after Verify release 10 issued, CO2 corrections  
 1700 1700  
 1650 1650  
 2150 2150CO2 corrections  
 2050 2050CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
 2500 2500CO2 correction  
 2500 2500corrected CO2 values, CO2 rounding corrections Aug 20th, rounding Aug 23rd  
 2700 2700CO2 corrections, CO2 rounding corrections Aug 20th  
 2500 2500CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections, CO2 rounding c  
 2500 2500CO2 corrections  
 3000 3000CO2 correction Aug 15th, CO2 rounding corrections Aug 20th  
 2700 2700CO2 corrections

Highway Fuel Economy (EPA) Alternative Fuel  
 Hwy2 Unit Comb2 Unit Hwy2 Unit Hwy2 Unit Comb2 Unit Range2 - Fuel2 Use Fuel2 Use Fuel2 Unit Fuel2 Unit

O2  
 ction Aug 20th

alue  
 ded CO2 value again, second time Aug 14th  
 gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per gallon
---------	---------	---------	---------	--------	-----	---	---------------	-----	------------------

gallons per 100 value...these values were switched  
 28.7473 21.5258 14.1043 20.4969 16.407 270 E Ethanol (E85) MPG miles per g  
 gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per g
---------	---------	---------	---------	--------	-----	---	---------------	-----	-------------

yes

/S set to yes

sumption to 6.2 per ASTM rounding procedure  
 ity and highway CO2 values

25.6	20.1038	13.5432	18.3117	15.3409	253	E	Ethanol (E85)	MPG	miles per gallon
------	---------	---------	---------	---------	-----	---	---------------	-----	------------------

27.1	20.7407	13.7947	19.3602	15.8444	314	E	Ethanol (E85)	MPG	miles per gallon
------	---------	---------	---------	---------	-----	---	---------------	-----	------------------

d weighted values not CO2 to tenths value that is imputed into Verify.

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	--------	-----	---	---------------	-----	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)	MPG	miles per gallon
------	--------	--------	---------	---------	-----	---	---------------	-----	------------------

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	--------	-----	---	---------------	-----	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)	MPG	miles per gallon
------	--------	--------	---------	---------	-----	---	---------------	-----	------------------

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

roup, CO2 rounding Aug 23rd  
nrounded highway and combined CO2 values  
o 29 MPG

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

ed MPG value  
nd corresponding 5-cycle values  
cted calculated values

ction Aug 20th  
rrections Aug 20th

hole CO2 value  
ction Aug 20th

rrections Aug 20th

ug 20th

orrections Aug 20th, CO2 rounding Aug 23rd



Relative Fuel	City CO2	Hwy CO2	Comb CO2	Fuel2 EPA	Description	Intake Val	Exhaust Val	Carline CI	Carline CI
					SIDI;	2	27	Small Station Wag	
						2	27	Small Station Wag	
					SIDI;	2	27	Small Station Wag	
					SIDI;	2	27	Small Station Wag	
					SIDI;	2	24	Compact C	
					SIDI;	2	24	Compact C	
2900	439	302	377	2900	SIDI; FFV;	2	24	Compact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
2900	439	302	377	2900	SIDI; FFV;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
2900	439	302	377	2900	SIDI; FFV;	2	23	Subcompa	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI; Unde	2	25	Midsize Ca	
					SIDI;	2	25	Midsize Ca	
					SIDI; Unde	2	26	Large Cars	
					SIDI;	2	26	Large Cars	
					SIDI;	2	26	Large Cars	
					SIDI;	2	27	Small Station Wag	
3100	458	338	404	3100	SIDI; FFV;	2	27	Small Station Wag	
					SIDI;	2	231	Small SUV 4WD	
2900	450	320	392	2900	SIDI; FFV;	2	231	Small SUV 4WD	
					SIDI;	2	231	Small SUV 4WD	
					SIDI;	2	233	Standard SUV 4W	
						2	233	Standard SUV 4W	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	21	Two Seaters	
					SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	25	Midsize Cars	
					SIDI;	2	24	Compact Cars	
4650	794	469	648	4650	FFV;	2	24	Compact Cars	
					SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	23	Subcompact Cars	
						1	15	Midsize Cars	
						2	21	Two Seaters	

	2	21	Two Seaters
	2	21	Two Seaters
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	1	14	Compact Cars
	1	14	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
SIDI;	2	25	Midsize Cars
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
cars	Derived 5-cycle label	6/22/2012	12265	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12092	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Derived 5-cycle label	8/28/2012	12549	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12093	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Derived 5-cycle label	8/28/2012	12551	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Derived 5-cycle label	8/28/2012	12550	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/21/2012	12228	N	N	
car	Vehicle Specific 5-cycle	6/22/2012	12229	N	N	el economy label values on. Previous values were XX MPG city, XX MPG highway, and XX MPG combined.
car	Vehicle Specific 5-cycle	8/15/2012	12227	N	N	el economy label values on. Previous values were XX MPG city, XX MPG highway, and XX MPG combined.
car	Vehicle Specific 5-cycle	6/22/2012	12230	N	N	el economy label values on. Previous values were XX MPG city, XX MPG highway, and XX MPG combined.
car	Vehicle Specific 5-cycle	8/15/2012	12226	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
cars	Derived 5-cycle label	4/26/2012	11490	N	N	
cars	Derived 5-cycle label	8/27/2012	12479	N	N	
	Vehicle Specific 5-cycle	7/13/2012	11319	N	N	
	Derived 5-cycle label	9/10/2012	12595	N	N	
	Vehicle Specific 5-cycle	6/28/2012	12158	N	N	
D	Derived 5-cycle label	6/11/2012	12437	N	N	
D	Vehicle Specific 5-cycle	7/16/2012	12105	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11510	N	N	
car	Vehicle Specific 5-cycle	7/13/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12106	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12108	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12111	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	8/27/2012	12122	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12115	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12113	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12116	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12119	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12117	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12440	N	N	
car	Vehicle Specific 5-cycle	8/20/2012	12211	N	N	
car	Vehicle Specific 5-cycle	7/12/2012	11087	N	N	

car	Vehicle Specific 5-cycle	4/15/2012	12441	N	N
car	Vehicle Specific 5-cycle	1/14/2013	12234	N	N
car	Vehicle Specific 5-cycle	6/11/2012	12128	N	N
car	Vehicle Specific 5-cycle	6/20/2012	12442	N	N
car	Vehicle Specific 5-cycle	6/21/2012	12130	N	N
car	Vehicle Specific 5-cycle	6/20/2012	12466	N	N
car	Derived 5-cycle label	7/19/2012	12135	N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187	N	N
car	Derived 5-cycle label	6/25/2012	12272	N	N
car	Vehicle Specific 5-cycle	7/12/2012	12271	N	N
car	Vehicle Specific 5-cycle	7/30/2012	12435	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373	N	N
car	Derived 5-cycle label	7/30/2012	10277	N	N
car	Derived 5-cycle label	6/25/2012	12273	N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287	N	N
car	Vehicle Specific 5-cycle	1/16/2012	10186	N	N
car	Vehicle Specific 5-cycle	1/25/2012	11044	N	N
car	Vehicle Specific 5-cycle	1/16/2012	10532	N	N
car	Vehicle Specific 5-cycle	1/16/2012	10534	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527	N	N
car	Derived 5-cycle label	6/22/2012	12264	N	N
car	Derived 5-cycle label	6/25/2012	12268	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529	N	N
car	Vehicle Specific 5-cycle	6/11/2012	12277	N	N
car	Vehicle Specific 5-cycle	4/6/2012	11531	N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531	N	N
car	Vehicle Specific 5-cycle	4/8/2012	11372	N	N
car	Derived 5-cycle label	6/22/2012	12263	N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219	N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300	N	N
car	Vehicle Specific 5-cycle	4/6/2012	11532	N	N
car	Derived 5-cycle label	6/25/2012	12267	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533	N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535	N	N
car	Vehicle Specific 5-cycle	1/19/2012	12434	N	N
cars	Derived 5-cycle label	6/25/2012	12151	N	N
cars	Derived 5-cycle label	6/25/2012	12266	N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11534	N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11536	N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158	N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163	N	N
car	Vehicle Specific 5-cycle	6/23/2012	11539	N	N
car	Vehicle Specific 5-cycle	6/23/2012	11547	N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554	N	N
	Derived 5-cycle label	6/18/2012	12432	N	N
	Vehicle Specific 5-cycle	6/11/2012	12276	N	N
	Derived 5-cycle label	6/11/2012	12431	N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563	N	N
D	Derived 5-cycle label	6/25/2012	12278	N	N
D	Derived 5-cycle label	6/25/2012	11559	N	N

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N	N	Y	ELECTRONICALLY CONTROLLED INLET/EXHAUST VALVE	INLET/EXHAUST VALVE
N	N	Y	ELECTRONICALLY CONTROLLED INLET/EXHAUST VALVE	INLET/EXHAUST VALVE
N	N	ENGINE CODE CEH (GALLARDO COUPE AND SEDAN)	INLET/EXHAUST VALVE	INLET/EXHAUST VALVE
N	N	ENGINE CN	Y	INLET ANIN
N	N	ENGINE CODE CEH (GALLARDO COUPE AND SEDAN)	INLET/EXHAUST VALVE	INLET/EXHAUST VALVE
N	N	ENGINE CN	Y	INLET ANIN
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y	CONTINUOUS VARIABLE VALVE TIMING
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	MECHANICAL HYDRAULIC VVT SYSTEM (INLET/EXHAUST)
N	N	N	N	N
N	N	N	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	SCR Equipped	N	N
N	N	SCR Equipped	N	N
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	N	Y	Electronic Control / Hydraulic adjustment
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	Y	position of intake/exhaust camshaft electronically
N	N	N	N	N
N	N	N	Y	INTAKE / EXHAUST CAM TIMING ADJUSTED HYDRAULIC
N	N	V6 CYLINDER 2 BANK SYSTEM	Y	MECHANICAL HYDRAULIC VVT SYSTEM (INLET/EXHAUST)

the first order for both lenses (4) is less than one, so the second order is not significant (6) and is neglected. This difference is of

1 Lithium Ion

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5

### 37 On-Board

STMENT

MECHANICAL-HYDRAULIC

the first order for both series (4) values are shown in figure 1 and are not significantly different. The difference in

MECHANICAL-HYDRAULIC

the Test of Interference for both groups (All values are  $p < 0.05$  when compared to baseline and to the 60-day follow-up). This difference was found

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

aust valves on a single camshaft. No change in valve overlaps.

MECHANICAL HYDRAULIC CATTI GT.

CONTINUOUSLY VVT  
CONTINUOUSLY VVT  
ECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
ECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC  
YDRAULIC  
controlled and hydraulically adjusted

controlled and hydraulically adjusted  
YDRAULIC  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
y controlled and hydraulically adjusted  
y controlled and hydraulically adjusted

YDRAULIC  
YDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

YDRAULIC  
YDRAULIC  
ND OUTLET CAMS 1 Lithium Ion 220 5 27 On-Board

YDRAULIC  
YDRAULIC

YDRAULIC  
YDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

LICALLY AND CONTROLLED ELECTRONICALLY  
AMS 1 NiMH 288 6 21.5 On-Board



## 1AC Induction

es(2)third gear at this port, F/G to gear by blind 40C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h

sed(2)ained at gear at this port, F/GD of the ethyl 40C, head in the speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical BRAKE PEDAL TRIGGERED REGENERATIVE

1Other

Other BRAKE PEDAL TRIGGERED REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM 1Other

Motor	Ger	Rated Mot	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Cell V	Off Board	Camless V	Oil Viscosi
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					CRDI	Common Rail Direct Diesel Injection	N			5W40
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40
					GDI	Spark Ignit	N			5W40 VW
					GDI	Spark Ignit	N			5W40 VW
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignit	N			5W40 VW
					GDI	Spark Ignit	N			5W40 VW
					GDI	Spark Ignit	N			5W40 VW
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignit	N			5W40 VW
h					GDI	Spark Ignit	N			5W30 VW
					GDI	Spark Ignit	N			5W40 VW
h					GDI	Spark Ignition Direct Injection	N			5W30 VW 50400 /
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignit	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					CRDI	Common Rail Direct Diesel Injection	N			5W30 VW 50700
					GDI	Spark Ignition Direct Injection	N			5W30 VW 50400 /
					GDI	Spark Ignition Direct Injection	N			5W30 VW 50400 /
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
					GDI	Spark Ignition Direct Injection	N			5W40 VW 50200
h					GDI	Spark Ignition Direct Injection	N			5W30 VW 50400 /
h					GDI	Spark Ignition Direct Injection	N			5W30 VW 50400 /
h					GDI	Spark Ignition Direct Injection	N			5W30 VW 50400 /
					GDI	Spark Ignit	N			5W40
					GDI	Spark Ignit	N			5W40
					GDI	Spark Ignit	N			5W40 VW 50200
					MFI	Multipoint/Sequential fuel inject	N			5W30 VW 504 00
h					GDI	Spark Ignition Direct Injection	N			5W30 VW 50400 /
					MFI	Multipoint/Sequential fuel inject	N			5W30 VW 504 00
h					GDI	Spark Ignition Direct Injection	N			5W30 VW 50400 /
					MFI	Multipoint/Sequential fuel inject	N			5W30 VW 504 00
					MFI	Multipoint/Sequential fuel inject	N			5W30 VW 504 00
					MFI	Multipoint/sequential fuel inject	N			0W40 / VW50200
					MFI	Multipoint/sequential fuel inject	N			10W60 VW 50101

	MFI	Multipoint/sequential fuel injection	No	5W30 VW 50400 /
	MFI	Multipoint/sequential fuel injection	No	5W30 VW 50400 /
	GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
	GDI	Spark Ignition	N	10W60 VW
	GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
	GDI	Spark Ignition	N	10W60 VW
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
	GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
	GDI	Spark Ignition Direct Injection	N	5W40 / VW50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	MFI	Multipoint/sequential fuel injection	No	5W40 VW 50200
	MFI	Multipoint/sequential fuel injection	No	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
3 PHASE PERMANENT MAGNET	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	CRDI	Common Rail Direct Diesel Injection	No	5W40
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	CRDI	Common Rail Direct Diesel Injection	No	5W40 VW 50501
	CRDI	Common Rail Direct Diesel Injection	No	5W40 VW 50501
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	MFI	Multipoint/sequential fuel injection	No	10W40 / VW5020
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	CRDI	Common Rail Direct Diesel Injection	No	5W30 VW 50700
3 PHASE CURRENT PERM. MAGNET	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
	GDI	Spark Ignition Direct Injection	N	5W40 VW 50200

Stop/Start	Stop/Start	Trans in FE	Trans as I	Model Typ	Charge De	Charge De	Charge De	Charge Su	EPA Calcul
N	No	Auto(AM-S6)	Auto(AM-S6)						
N	No	Auto(AM-S6)	Auto(AM-S6)						
N	No	Manual(M6)	Manual(M6)	3 frt manual					
N	No	Auto(AM-S6)	Auto(AM-S6)	3 quattro					
N	No	Auto(AV-S)	Auto(AV-S)						
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Manual(M6)	Manual(M6)						
N	No	Auto(AV-S8)	Auto(AV-S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Manual(M6)	Manual(M6)						
N	No	Auto(AV-S8)	Auto(AV-S8)	Audi A6 CVT					
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)	Audi A6 quattro					
Y	Yes	Auto(S8)	Auto(S8)						
Y	Yes	Auto(S8)	Auto(S8)						
50700	Yes	Auto(S8)	Auto(S8)						
Y	Yes	Auto(S8)	Auto(S8)						
50700	Yes	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)						
N	No	Auto(S8)	Auto(S8)	Audi Q7					
N	No	Auto(S8)	Auto(S8)						
50700	No	Auto(AM-S7)	Auto(AM-S7)						
50700	No	Auto(AM-S7)	Auto(AM-S7)						
N	No	Auto(AM-S7)	Auto(AM-S7)						
N	No	Manual(M6)	Manual(M6)						
N	No	Auto(AM-S7)	Auto(AM-S7)						
N	No	Manual(M6)	Manual(M6)						
N	No	Auto(AM-S7)	Auto(AM-S7)						
50700	No	Auto(AM-S7)	Auto(AM-S7)						
50700	No	Auto(AM-S7)	Auto(AM-S7)						
50700	No	Auto(S8)	Auto(S8)						
N	No	Auto(AM-S6)	Auto(AM-S6)	Coupe quattro					
N	No	Auto(AM-S6)	Auto(AM-S6)	Coupe quattro					
N	No	Manual(M6)	Manual(M6)	TRS					
N	No	Auto(S6)	Auto(S6)						
50700	No	Auto(S8)	Auto(S8)						
N	No	Auto(S6)	Auto(S6)						
50700	No	Auto(S8)	Auto(S8)						
N	No	Auto(S6)	Auto(S6)						
N	No	Auto(S6)	Auto(S6)						
VW50500	No	Auto(S8)	Auto(S8)						
VW50500	No	Auto(AM-S7)	Auto(AM-S7)						

50700	Yes	Auto(AM-S7)	Auto(AM-S7)
50700	Yes	Auto(AM-S7)	Auto(AM-S7)
50500	No	Auto(AM-S6)	Auto(AM-S6)
50500	No	Manual(M6)	Manual(M6) Gallardo C
50500	No	Auto(AM-S6)	Auto(AM-S6)
50500	No	Manual(M6)	Manual(M6) Gallardo S
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6)
	No	Manual(M6)	Manual(M6)
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6)
	No	Manual(M6)	Manual(M6)
	No	Auto(S6)	Auto(S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6) C M6
	No	Auto(S6)	Auto(S6)
	No	Auto(S6)	Auto(S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6) Jetta SportWagen M6
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Manual(M6)	Manual(M6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(S6)	Auto(S6) Jetta Base
	No	Manual(M5)	Manual(M5)
	No	Manual(M6)	Manual(M6)
	No	Manual(M6)	Manual(M6) Jetta SportWagen M6
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Auto(AM-S7)	Auto(AM-S7)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6) Jetta SportWagen M6
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Manual(M6)	Manual(M6)
	No	Auto(S6)	Auto(S6)
	No	Manual(M5)	Manual(M5)
	No	Auto(AM-S6)	Auto(AM-S6)
	No	Auto(S6)	Auto(S6) Tiguan front
	No	Manual(M6)	Manual(M6)
	No	Auto(S6)	Auto(S6)
	No	Auto(S8)	Auto(S8)
	No	Auto(S8)	Auto(S8)
	No	Auto(S8)	Auto(S8) Touareg Hybrid

Product	Model	Year	Calcu EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA SmSmartWay
		30.8		6	6 DAD XV02.03PA	7	
		46.2		9	8 DVW XV02.0U5N	5	
		30.4		6	6 DAD XV02.03PA	7	
		30.9		6	6 DAD XV02.03UA	5	
		35.2		7	7 DAD XV02.0	5	
		30.8		6	6 DAD XV02.0	5	
		30.9		6	6 DAD XJ02.0FUB	5	
		33.2		7	7 DAD XV02.03UB	5	
		35.2		7	7 DAD XV02.03UB	5	
		30.8		6	6 DAD XV02.03UB	5	
		30.9		6	6 DAD XJ02.0	5	
		30.8		6	6 DAD XV02.0	5	
		30.9		6	6 DAD XJ02.0	5	
		33.2		7	7 DAD XV02.03UB	5	
		36.9		7	7 DAD XV02.03UB	5	
		30.8		6	6 DAD XV02.03UB	5	
		28.1		5	5 DAD XJ03.03UF	5	
		27.5		5	5 DAD XJ03.03UF	5	
		27.5		5	5 DAD XJ03.0	5	
		27.1		5	5 DAD XV04.0	5	
		27.5		5	5 DAD XJ03.0	5	
		24.4		4	4 DAD XV04.03UJ	5	
		19.3		3	3 DVW XV06.3UA8	5	
		29.5		6	6 DAD XV02.03UB	5	
		29.5		6	6 DAD XJ02.0FUB	5	
		28.8		6	6 DAD XT02.04UB	5	
		29.6		6	6 DAD XJ02.0FUB	5	
		34		7	7 DAD XT02.0HUB	5	
		22.9		4	4 DAD XT03.0TLF	5	
		28.1		5	4 DAD XT03.03UG	5	
		23		4	4 DAD XV04.23UL	5	
		22.6		4	4 DAD XV04.23UL	5	
		26.9		5	5 DAD XJ03.03UF	5	
		23.5		5	5 DAD XJ03.03UF	5	
		26.9		5	5 DAD XJ03.03UF	5	
		23.5		5	5 DAD XJ03.03UF	5	
		26.4		5	5 DAD XJ03.03UF	5	
		25.5		5	5 DAD XV04.03UJ	5	
		25.5		5	5 DAD XV04.03UJ	5	
		23.6		4	4 DAD XV04.03UJ	5	
		33.3		7	7 DAD XV02.03UA	5	
		33.3		7	7 DAD XV02.03UA	5	
		25.6		5	5 DAD XV02.53UK	5	
		17.2		2	2 DBEXV06.0501	5	
		23.6		4	4 DAD XV04.03UJ	5	
		17.4		2	2 DBEXV06.0501	5	
		21.8		4	4 DAD XV04.03UJ	5	
		17.2		2	2 DBEXV06.0501	5	
		17.4		2	2 DBEXV06.0501	5	
		15.9		2	2 DBEXV06.84LA	5	
		12.6		1	1 DBGTV08.0V16	5	

16.4		2	2 DNLXV06.5L83	5
14.5		1	1 DNLXV06.5L83	5
19.4		3	3 DAD XV05.2LR8	5
17.4		3	3 DAD XV05.	5
19.3		3	3 DAD XV05.2LR8	5
16.1		2	2 DAD XV05.	5
43.7		8	7 DVWXV02.0U5N	5
31.8		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
31.6		6	6 DVWXV02.5A59	7
31.9		6	6 DVWXV02.5M59	7
31.5		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
30.3		6	6 DVWXV02.5A59	7
32.3		6	6 DVWXV02.03PA	7
31.8		6	6 DVWXV02.03PA	7
25.8		5	5 DVWXV03.6U46	5
24.8		5	5 DVWXV03.6U46	5
32.4		6	6 DVWXV02.03SA	5
46.2		9	8 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
28.5		5	5 DAD XV02.03UA	5
34.8		7	7 DAD XV02.03PA	7
31.2		6	6 DAD XV02.03PA	7
35		7	7 DVWXV02.03PA	7
46.2		9	8 DVWXV02.0U5N	5
32.9		6	6 DVWXV02.0U36	5
34.7		7	7 DVWXV02.0U36	5
32.6		7	7 DVWXV02.03PA	7
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
60.9		10	10 DVWXV01.4PHE	7
44.2		8	7 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
44.6		9	8 DVWXV02.0U4S	5
46.4		9	8 DVWXV02.0U4S	5
31.9		6	6 DVWXV02.5A59	7
31.7		7	7 DVWXV02.5M59	7
28.5		6	6 DVWXV03.6U41	5
29.9		6	6 DVWXJ02.03UA	5
26.4		5	5 DVWXJ02.03UA	5
29.6		6	6 DVWXJ02.03UA	5
23.3		6	5 DAD XT03.02UG	5
25		4	4 DVWXT03.6U76	5
28.2		5	5 DVWXT03.0HEV	5



Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DADXV02.03UA 5

DADXV02.03UA 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

Highway Miles Per Gallon (City/Highway)	Highway Miles Per Gallon (City/Highway)	Highway Miles Per Gallon (City/Highway)	Highway Miles Per Gallon (City/Highway)	Highway Miles Per Gallon (City/Highway)	Highway Miles Per Gallon (City/Highway)
		400	432	319	381
3100			340	245	297
		400	442	296	376
		400	442	316	385
600			373	304	342
		400	437	297	374
		400	435	306	377
600			397	276	343
600			373	304	342
		400	437	297	374
		400	435	306	377
		400	437	297	374
		400	435	306	377
600			397	276	343
1350			360	272	320
		400	437	297	374
		1400	482	326	412
		1900	498	321	418
		1900	498	321	418
		1900	515	313	424
		1900	498	321	418
		3400	554	345	460
		6150	675	430	565
		900	444	333	394
		900	444	333	394
		900	450	314	389
		900	452	322	393
600			369	298	337
		4150	573	411	500
		1400	541	369	464
		4150	562	379	480
		4150	558	398	486
		1900	488	321	413
		2650	441	355	402
		1900	488	321	413
		2650	441	355	402
		1900	500	341	429
		2650	530	330	440
		2650	530	330	440
		3400	580	347	475
600			394	284	345
600			394	284	345
		2650	499	350	432
		8650	787	474	646
		4150	590	364	488
		8650	768	469	633
		5150	638	370	517
		8650	787	474	646
		8650	768	469	633
		10400	840	501	688
		16900	1050	599	847

	10400	836	481	676
	12150	902	547	742
	6150	657	447	562
	7400	734	511	634
	6150	660	446	564
	8650	768	452	626
2600		354	262	313
100		401	291	351
2600		365	250	313
	400	430	298	371
850		396	310	358
850		408	289	354
	400	421	310	371
2600		365	250	313
	400	430	298	371
100		418	329	378
100		403	283	349
100		425	279	360
	1900	507	334	429
	2650	523	351	446
100		405	257	338
3100		340	245	297
3100		342	243	297
1350		374	286	334
1350		388	271	335
	1400	460	330	401
1100		379	271	331
100		416	287	358
1100		372	280	331
3100		340	245	297
850		381	299	344
2100		361	262	316
600		403	272	344
3100		342	243	297
1350		374	286	334
1350		388	271	335
5350		211	182	198
2850		352	258	310
3100		342	243	297
1350		374	286	334
1350		388	271	335
3100		331	240	290
3350		330	239	289
850		401	289	351
1350		391	275	339
	900	449	319	390
	900	430	341	390
	1900	484	336	417
	900	435	343	394
	900	517	351	442
	3400	520	391	462
	1900	447	372	413

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705	353	546.6	836	481	676.2
771	418	612.2	902	547	742.2
552	349	460.6	657	447	562.5
635	370	515.8	734	511	633.6
556	348	462.4	660	446	563.7
681	391	550.5	768	452	625.8
272	184	232.4	354.3	261.8	312.7
334.3	211.2	278.9	401	290.6	351.3
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
323.7	227.6	280.5	396.3	310.3	357.6
335.2	207.2	277.6	407.6	288.8	354.1
332	220.9	282	421	310	371
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
335.4	235.6	290.5	418.2	329.4	378.2
327.2	207.7	273.4	402.8	282.7	348.8
346.3	202.5	281.6	425.2	279.3	359.5
419	253	344.3	506.7	333.8	428.9
434	265	358	523	351.1	445.6
321	213	272.4	404.7	256.6	338.1
259.8	171.2	219.9	339.8	244.6	297
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
372	240	312.6	459.5	330.5	401.4
295.1	203.2	253.7	379.2	271.3	330.6
340.4	215.5	284.2	415.9	287	357.9
300.9	196.7	254	372	280.4	330.8
259.8	171.2	219.9	339.8	244.6	297
315	214	269.6	381.3	298.8	344.2
307	192	255.2	360.5	262	316.2
333.9	197.2	272.4	403.3	271.8	344.1
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
155	134	145.6	211	182	198
270	181	230	351.9	257.7	309.5
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
268	179	228	331	240	290
266	162	219.2	330	239	289
328.2	217.8	278.5	400.9	289.4	350.7
339.6	206.8	279.8	391.3	275	339
372	238	311.7	449	319	390.5
339.6	244.4	296.8	429.9	341.3	390
407	248	335.4	484	336	417.4
343.6	246	299.7	434.6	343.5	393.6
422	248	343.7	517	351	442.3
416	281	355.2	520.1	390.6	461.8
354	267	314.8	446.9	371.8	413.1

City	Distance to nearest 40 miles	Distance	Comb Vol Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT
N		4.2		4.2			
N		2.9		2.9			
N		4.2		4.2			
N		4.2		4.2			
N		3.8		3.8			
N		4.2		4.2			
N		4.2		4.2			
N		3.8		3.8			
N		3.8		3.8			
N		4.2		4.2			
N		4.2		4.2			
N		4.2		4.2			
N		3.8		3.8			
N		3.6		3.6			
N		4.2		4.2			
N		4.5		4.5			
N		4.8		4.8			
N		4.8		4.8			
N		4.8		4.8			
N		5.3		5.3			
N		6.2		6.2			
N		4.3		4.3			
N		4.3		4.3			
N		4.3		4.3			
N		4.3		4.3			
N		3.8		3.8			
N		5.6		5.6			
N		4.5		4.5			
N		5.6		5.6			
N		5.6		5.6			
N		4.8		4.8			
N		5		5			
N		4.8		4.8			
N		5		5			
N		4.8		4.8			
N		5		5			
N		5		5			
N		5.3		5.3			
N		3.8		3.8			
N		3.8		3.8			
N		5		5			
N		7.1		7.1			
N		5.6		5.6			
N		7.1		7.1			
N		5.9		5.9			
N		7.1		7.1			
N		7.1		7.1			
N		7.7		7.7			
N		10		10			

N	7.7	7.7
N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.2	2.2
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8



2017-FFP\_005108





[illegible]

mined)

















**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/20/2012 7:12:56 PM  
**Subject:** Please give me a call when you have a chance.

Hi, Sebastian.

Please call me when you have a chance about the coastdown program

Thanks!

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Schmidt, Oliver (EEO)"  
**Sent:** Thur 9/20/2012 8:36:03 PM  
**Subject:** Tentative: RE: Audi Meeting with EPA

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** Robert Peavyhouse/AA/USEPA/US@EPA; Tom Anderson/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; "Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; om Anderson/AA/USEPA/US@EPA; Chris Nevers/AA/USEPA/US@EPA; "Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; hris Nevers/AA/USEPA/US@EPA; "Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; oel Ball/AA/USEPA/US@EPA; Joel Dalton/AA/USEPA/US@EPA; Linc Wehrly/AA/USEPA/US@EPA; "Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; oel Dalton/AA/USEPA/US@EPA; Linc Wehrly/AA/USEPA/US@EPA; "Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; inc Wehrly/AA/USEPA/US@EPA; "Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; oberts French/AA/USEPA/US@EPA; AA-C126/AA-OTAQ-OFFICE [AA-C126/AA-OTAQ-OFFICE@v18h1drtgu300.aa.ad.epa.gov]; A-C126/AA-OTAQ-OFFICE [AA-C126/AA-OTAQ-OFFICE@v18h1drtgu300.aa.ad.epa.gov]; A-C127/AA-OTAQ-OFFICE [AA-C127/AA-OTAQ-OFFICE@v18h1drtgu300.aa.ad.epa.gov]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 9/20/2012 9:38:41 PM  
**Subject:** RE: Invitation: RE: Audi Meeting with EPA (Sep 17 01:00 PM EDT in AA-C126/AA-OTAQ-OFFICE@EPA)  
<mailto:Snyder.Jim@epamail.epa.gov>

Hello Jim:

I thought that you may have mentioned the rescheduling this meeting during our meeting this afternoon.

I cannot seem to find anything. We would just like to nail down some travel plans.

Thanks,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: [leonard.kata@vw.com](mailto:leonard.kata@vw.com)

---

From: Kata, Leonard (EEO)  
Sent: Monday, September 17, 2012 12:18 PM  
To: 'Jim Snyder/AA/USEPA/US'  
Cc: Robert Peavyhouse/AA/USEPA/US; Tom Anderson/AA/USEPA/US; Chris Nevers/AA/USEPA/US; Rist, Domenic (I/EA-523); Joel Ball/AA/USEPA/US; Joel Dalton/AA/USEPA/US; Linc Wehrly/AA/USEPA/US; Rech, Lothar (I/EA-523); Schmidt, Oliver (EEO); Roberts French/AA/USEPA/US; AA-C126/AA-OTAQ-OFFICE; AA-C127/AA-OTAQ-OFFICE  
Subject: RE: Invitation: RE: Audi Meeting with EPA (Sep 17 01:00 PM EDT in AA-C126/AA-OTAQ-

OFFICE@EPA)  
Importance: High

Hello Jim:

I think that there is some misunderstanding. In my September 11, 2012 e-mail, I had asked for a meeting to cover the topics below on either of the following dates.

Monday, October 29 2012; afternoon  
Tuesday, October 30, 2012; morning

I see that you have scheduled the meeting for today.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

-----Original Appointment-----

From: Jim Snyder/AA/USEPA/US [mailto:Snyder.Jim@epamail.epa.gov]

Sent: Monday, September 17, 2012 11:04 AM

To: Chris Nevers/AA/USEPA/US; Rist, Domenic (I/EA-523); Joel Ball/AA/USEPA/US; Joel Dalton/AA/USEPA/US; Kata, Leonard (EEO); Linc Wehrly/AA/USEPA/US; Rech, Lothar (I/EA-523); Schmidt, Oliver (EEO); Roberts French/AA/USEPA/US; AA-C126/AA-OTAQ-OFFICE; AA-C127/AA-OTAQ-OFFICE

Cc: Robert Peavyhouse/AA/USEPA/US; Tom Anderson/AA/USEPA/US

Subject: Invitation: RE: Audi Meeting with EPA (Sep 17 01:00 PM EDT in AA-C126/AA-OTAQ-OFFICE@EPA)

When: Monday, September 17, 2012 1:00 PM-3:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where:

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation



- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification << File: ecblank.gif >> << File: pic05707.gif >> << File: ATT00001.htm >> << File: c110409.ics >>

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 9/20/2012 9:51:37 PM  
**Subject:** Accepted: FW: Information Update - Room has changed: RE: Audi Meeting with EPA  
[winmail.dat](#)  
[message\\_body.rtf](#)

Jim:

I will confirm a count from our side ASAP.

Thanks,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: [leonard.kata@vw.com](mailto:leonard.kata@vw.com)

Jim:

I will confirm a count from our side ASAP.

Thanks,



**Ex. 7**

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 9/21/2012 12:19:36 PM  
**Subject:** FW: VW Group - Test Update

Hi Jim,

Just a follow up to my voicemail; Can you provide an update for us this sometime this morning? Please see my comments to Vince below.

From: Giles, Michael (EEO)  
Sent: Thursday, September 20, 2012 10:39 AM  
To: Vincent Mazaitis (Mazaitis.Vincent@epamail.epa.gov)  
Cc: Rodgers, William  
Subject: VW Group - Test Update

Hi Vince,

Would you be able to send us any preliminary results for the Jetta Hybrid test? Also, if you could send us an rough idea of the test plan over the next days it would be great.

Lastly, we are requesting any update you can provide on the Beetle TDI test situation.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** DavidA Wright/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA;William Ott/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; illiam Ott/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; hris Nevers/AA/USEPA/US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 9/21/2012 5:10:37 PM  
**Subject:** RE: Request for US06 Drive Trace  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[image001.gif](#)

Hello David,

I understand that you spoke with Len Kata about this yesterday, but just as a follow up:

- Currently, the labs record only 1 hz data .
- 10 hz data logging should be possible for the future. We have communicated the need for 10 hz data to our factories.

Please let us know if there are any other specific requirements related to this issue.

Regards,

Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, September 12, 2012 8:34 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder; William Ott; Chris Nevers  
Subject: RE: Request for US06 Drive Trace

Mike,

Thank you for your response. I am wondering, if per our original request, if the factory has any 10 hz data, or if the only data available are 1 hz?

EPA may be requesting additional drive trace data from certification tests in the future and will be requesting the data in the format specified by SAEJ2951. Please do not hesitate to contact me if you require additional information or have further questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

"Giles, Michael (EEO)" ---09/05/2012 08:36:55 AM---Hello David, Please find attached the drive trace that the factory provided for this test.

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 09/05/2012 08:36 AM  
Subject: RE: Request for US06 Drive Trace

Hello David,

Please find attached the drive trace that the factory provided for this test.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, August 23, 2012 9:09 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: RE: Request for US06 Drive Trace

Mike,

Thanks for your reply, I look forward to receiving the data once it has been provided by the factory. Please let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

"Giles, Michael (EEO)" ---08/23/2012 08:05:42 AM---David, I have forwarded your request to our factory and will reply with the information as soon as i

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/23/2012 08:05 AM  
Subject: RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, August 22, 2012 3:54 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace

Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:



Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\* [attachment

"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[];  
N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Mon 9/24/2012 11:26:47 AM  
**Subject:** Re: VW Group - Test Update

Hello Mike,

I talked with the lab this morning, and for vehicle # 361 730 136/13 (Hybrid), we are awaiting post test processing including QC. I'll forward that data as soon as I receive it.

We are awaiting the o.k. for diesel testing for VW324 10220/13. I'll find out more about testing later this morning.

If you have any questions or concerns, please contact me.

Thanks for your patience Mike.

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 09/20/2012 10:39 AM  
Subject: VW Group - Test Update

Hi Vince,

Would you be able to send us any preliminary results for the Jetta Hybrid test? Also, if you could send us an rough idea of the test plan over the next days it would be great.

Lastly, we are requesting any update you can provide on the Beetle TDI test situation.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Vincent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; im Snyder/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA[]; avidA Wright/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 9/24/2012 12:24:07 PM  
**Subject:** RE: VW Group - Test Update  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Thanks Vince.

We would appreciate it if you could forward the results as soon as they are available. Also, we are interested in the planned exhaust testing schedule for this week.

Regards,

Mike

From: Vincent Mazaitis [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Monday, September 24, 2012 7:27 AM  
To: Giles, Michael (EEO)  
Cc: Rodgers, William (EEO); Jim Snyder; DavidA Wright  
Subject: Re: VW Group - Test Update

Hello Mike,

I talked with the lab this morning, and for vehicle # 361 730 136/13 (Hybrid), we are awaiting post test processing including QC. I'll forward that data as soon as I receive it.

We are awaiting the o.k. for diesel testing for VW324 10220/13. I'll find out more about testing later this morning.

If you have any questions or concerns, please contact me.

Thanks for your patience Mike.

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>

To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 09/20/2012 10:39 AM  
Subject: VW Group - Test Update

Hi Vince,

Would you be able to send us any preliminary results for the Jetta Hybrid test? Also, if you could send us an rough idea of the test plan over the next days it would be great.

Lastly, we are requesting any update you can provide on the Beetle TDI test situation.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 9/24/2012 3:11:09 PM  
**Subject:** VW Group - Supplemental Information VID D3UG-DAQ-1

Hello Jim,

We have submitted the Supplemental Information for confirmatory testing of the Audi A8 TDI diesel, VID D3UG-DAQ-1. We are hoping to schedule a delivery date of October 22 with testing on Oct 24th.

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Mon 9/24/2012 6:43:10 PM  
**Subject:** RE: VW Group - Test Update  
[361 730 136-13 9-19-12.pdf](#)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Hello Mike,

Please find enclosed the FTP and Evap Laboratory Test Results for 361 730 136/13 Config 00.

I'm not sure when the 4bag FTP-Hwy-US06 are scheduled. I'll let you know as soon as I find out.

If you have any questions or concerns, please contact me.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>, Jim Snyder/AA/USEPA/US@EPA, DavidA Wright/AA/USEPA/US@EPA  
Date: 09/24/2012 08:31 AM  
Subject: RE: VW Group - Test Update

Thanks Vince.

We would appreciate it if you could forward the results as soon as they are available. Also, we are interested in the planned exhaust testing schedule for this week.

Regards,

Mike

From: Vincent Mazaitis [mailto:Mazaitis.Vincent@epamail.epa.gov]

Sent: Monday, September 24, 2012 7:27 AM  
To: Giles, Michael (EEO)  
Cc: Rodgers, William (EEO); Jim Snyder; David A Wright  
Subject: Re: VW Group - Test Update

Hello Mike,

I talked with the lab this morning, and for vehicle # 361 730 136/13 (Hybrid), we are awaiting post test processing including QC. I'll forward that data as soon as I receive it.

We are awaiting the o.k. for diesel testing for VW324 10220/13. I'll find out more about testing later this morning.

If you have any questions or concerns, please contact me.

Thanks for your patience Mike.

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 09/20/2012 10:39 AM  
Subject: VW Group - Test Update

Hi Vince,

Would you be able to send us any preliminary results for the Jetta Hybrid test? Also, if you could send us an rough idea of the test plan over the next days it would be great.

Lastly, we are requesting any update you can provide on the Beetle TDI test situation.

Thanks,

Mike



Michael Giles

Certification Specialist

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CERT

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0257-015				Vehicle ID: 361 730 136/13			
	<b>Test Information</b>			Test Date: 9/19/2012 Key Start / Hot Soak: 09:55:29 / 09:46 Fuel Container ID: F00023 Fuel Type: 61 Tier 2 Cert Test Fuel Test Procedure: 21 Federal fuel 2-day exhaust (w/can loa) Calculation Method: Gasoline Pretest Remarks:			
				MFR Name: VOLKSWAGEN MFR Codes: 590 VWX Config #: 00 Transmission: AUTO Shift Schedule: A09980005 Beginning Odometer: 009437.0 KM Drive Schedule: ftp3bag Soak Period: 22.5 hours			
	<b>Bag Data</b>						
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
	<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
	Sample	5.411	21.139	1.449	0.792	2.384	
Ambient	3.157	3.287	0.028	0.047	2.022		
Net Concentration	2.441	18.047	1.423	0.748	0.482	1.912	
Remarks:							
<b>Phase 2</b>	2.751	1.987	0.040	0.308	2.002		
Ambient	2.764	1.150	0.013	0.044	1.989		
Net Concentration	0.051	0.863	0.027	0.265	0.059	-0.014	
Remarks:							
<b>Phase 3</b>	2.820	9.411	0.136	0.655	2.120		
Ambient	2.566	0.532	0.000	0.043	1.971		
Net Concentration	0.380	8.904	0.136	0.615	0.245	0.110	
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks: This test has SHED results. SHED Test Number = 2012-0257-015							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.023	0.345	0.041	224.9	0.005	0.018 / 0.019	39.679
Phase 2	0.001	0.026	0.001	126.8	0.001	0.000 / 0.000	70.538
Phase 3	0.004	0.170	0.004	184.2	0.003	0.001 / 0.001	48.510
Weighted	0.00618	0.13201	0.01015	162.940	0.00237	(NMOG=1.04xNMHC) 0.0040 / 0.0042	
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>				<u>Dyno Settings</u>		
Phase 1	39.59				Dyno #: D002		
Phase 2	70.38				Inertia: 3625		
Phase 3	48.40				EPA Set Co A: 7.3499999		
					EPA Set Co B: 0.0141		
					EPA Set Co C: 0.01545		
Weighted	54.69				Emiss-Bench: D002		
v120518 - d002 EPAVDAEm120919034122 Page 1 of 2							

## CVS

Test Number: 2012-0257-015

Vehicle ID: 361 730 136/13

<b>Results</b>	<b>HC-FID</b>	<b>CO</b>	<b>NOx</b>	<b>CO2</b>	<b>CH4</b>	<b>NMHC</b>	<b>Meth Response</b>
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	1.098
Phase 1	0.083	1.239	0.146	806.6	0.019	0.065	
Phase 2	0.003	0.101	0.005	488.0	0.004	0.000	
Phase 3	0.013	0.610	0.014	661.9	0.010	0.004	



### Phase 1

## Phase 2

### Phase 3

### Phase 4

Barometer (inHg)	29.13	29.15	29.16
Avg Cell Temp (degF)	75.03	75.22	75.27
Dew Point (degF)	49.39	49.52	49.08
Specific Humidity (grains/lbm)	53.75	53.98	53.08
NOx Corr Factor	0.9092	0.9101	0.9066
CO2 Dilution Factor	16.860	43.478	20.411
CFV Vmix (scf @68F)	2082.25	3558.99	2078.86

CVS Flow Rate Avg (scfm)	245.40	245.39	245.49
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Fan Placement: One Fan - Up - Front

Phase Time (secs)	509.10	870.20	508.10
Distance (miles)	3.587	3.848	3.594
Bag Analysis Time (secs)	76.9	74.1	75.6

for Procedure 21 Federal fuel 2-day exhaust (w/can load)

<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>
1E+07	0.007	0.178	0.0061	155	0	0.0046


<u>Odometer</u>	<u>MPG</u>
9082 K	57.2

MPG is 4.59 % higher than EPA MPG

MFR Lab; Volkswagen AG, Dept EASZ/1

Dyno: 21  
Fuel: 61 Tier 2 Cert Gasoline

**Variable Temperature SHED Report****Test: 72 °F - 96 °F for 48 Hours****Test No: 2012-0257-014****Mfr: 00590 VID: 361 730 136/13 Config: 00**

Test Purpose	1	VTSHED# - Net Vol	PZ1 - 58.819 m^3
Test Procedure	23	Cert Flag	Y
Fuel Type	61 Tier 2 Cert Test Fue	Requester	Jim Snyder
Technician Name	20511	Validators Initials	

**DIURNAL AND TOTAL EVAPORATIVE EMISSIONS**

Started (D@T)	09/20/2012 @ 05:22	Finished (D@T)	09/22/2012 @ 05:23
Start Temp (°F)	72.00	Test Length (hrs)	48
Day 1 Total (gHC)	0.114642	Diurnal (gHC)	0.115434
Day 2 Total (gHC)	0.115434	Hot_Soak_HC_(g)	0.007948
Day 3 Total (gHC)	0	Total Emissions (gHC)	<b>0.123382</b>

**QUALITY CONTROL CHECKS**

- ☒ 1. Was the Vehicle Soak-Time greater than or equal to 6?  
The Vehicle Soak-Time was 06:01:41.
- ☒ 2. Was the Vehicle Soak-Temperature during the final 6 hours 72 +/-3 °F?  
The largest Vehicle Soak-Temperature deviation during the final 6 hours was 71.82 °F.
- ☒ 3. Was the Time-Difference between closing & sealing the SHED 0 +/-5 min?  
The Time-Difference between closing & sealing the SHED was 0.00 min.
- ☒ 4. Was the SHED Feedback minus Setpoint Temperature (Underbody) 0 +/-3 °F?  
The difference was 1.44 °F.
- ☒ 5. Was the Average of SHED Feedback minus SHED Setpoint Temperature 0 +/-2 °F?  
The difference was 0.23 °F.
- ☒ 6. Was the Average Left & Right Sidewall minus SHED Setpoint Temperature 0 +/-5 °F?  
The difference was 1.49 °F.
- ☒ 7. Was the Cold-Water-In-Temp greater than or equal to 40 °F?  
The Minimum Cold-Water-In-Temp was 61.95 °F.
- ☒ 8. Was the Inside versus Outside Differential Pressure 0 +/-2 inH?  
The Differential-Pressure at its largest deviation was 0.40 inH.
- ☒ 9. Was the 1-day HC-Value taken at 1440 +/-6 min?  
The 1-day HC-Value was taken at 1440.05 min.
- ☒ 10. Was the 2-day HC-Value taken at 2880 +/-6 min?  
The 2-day HC-Value was taken at 2880.17 min.

FTP TID: 015 - Hot Soak TID: 015 - VERIFY Status: Unknown

**QC Note: All Automated Quality Checks Passed**

**To:** Vincent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** DavidA Wright/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; im Snyder/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 9/24/2012 7:11:51 PM  
**Subject:** RE: VW Group - Test Update  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
<mailto:Mazaitis.Vincent@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Thanks Vince,

We had indirect word from Ben that preconditioning was to be tomorrow and testing Wednesday. But if you hear anything different please let us know.

From: Vincent Mazaitis [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Monday, September 24, 2012 2:43 PM  
To: Giles, Michael (EEO)  
Cc: DavidA Wright; Jim Snyder; Rodgers, William (EEO)  
Subject: RE: VW Group - Test Update

Hello Mike,

Please find enclosed the FTP and Evap Laboratory Test Results for 361 730 136/13 Config 00.

I'm not sure when the 4bag FTP-Hwy-US06 are scheduled. I'll let you know as soon as I find out.

If you have any questions or concerns, please contact me.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>, Jim Snyder/AA/USEPA/US@EPA, DavidA Wright/AA/USEPA/US@EPA  
Date: 09/24/2012 08:31 AM  
Subject: RE: VW Group - Test Update

Thanks Vince.

We would appreciate it if you could forward the results as soon as they are available. Also, we are interested in the planned exhaust testing schedule for this week.

Regards,

Mike

From: Vincent Mazaitis [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Monday, September 24, 2012 7:27 AM  
To: Giles, Michael (EEO)  
Cc: Rodgers, William (EEO); Jim Snyder; DavidA Wright  
Subject: Re: VW Group - Test Update

Hello Mike,

I talked with the lab this morning, and for vehicle # 361 730 136/13 (Hybrid), we are awaiting post test processing including QC. I'll forward that data as soon as I receive it.

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Thanks for your patience Mike.

Vince Mazaitis

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To: Vincent Mazaitis/AA/USEPA/US@EPA

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Date: 09/20/2012 10:39 AM  
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Thanks,

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FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 9/25/2012 12:11:59 PM  
**Subject:** VW Testing

Hi Jim,

Just as a heads up, as I mentioned in my voice message this morning, our colleagues (Juergen Peter and Hannah Schlueter) are interested in a quick meeting with you sometime today if you are available for 20 minutes or so. They had suggested 1:00 or 1:30 timeframe. He mentioned that he would like to be here for the Start of Exhaust testing for the Hybrid and also discuss any new information you might have about the Beetle testing.

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**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 9/25/2012 2:08:52 PM  
**Subject:** RE: VW Testing

Hi Jim,

I just spoke with Juergen, he is still interested in a quick visit around 1:00. As you suggested, I told him to go to the office side of EPA.

Thanks

Mike

From: Giles, Michael (EEO)  
Sent: Tuesday, September 25, 2012 8:12 AM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov)  
Subject: VW Testing

Hi Jim,

Just as a heads up, as I mentioned in my voice message this morning, our colleagues (Juergen Peter and Hannah Schlueter) are interested in a quick meeting with you sometime today if you are available for 20 minutes or so. They had suggested 1:00 or 1:30 timeframe. He mentioned that he would like to be here for the Start of Exhaust testing for the Hybrid and also discuss any new information you might have about the Beetle testing.

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**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; im  
Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 9/25/2012 2:15:38 PM  
**Subject:** VW Schedule - Wednesday

Hi Vince,

Ben told us yesterday that the Jetta Hybrid exhaust tests are scheduled for Wednesday - can you confirm? Also is 7:00 am still the best time to show up?

As a second item, I spoke with Jim who mentioned that there has been progress with the diesel test lab, and that the Beetle might be tested sometime this week. If you could keep us advised of tentative or actual timing as it develops it would be greatly appreciated.

Thanks,

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**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Tue 9/25/2012 2:55:47 PM  
**Subject:** Re: VW Schedule - Wednesday

Hello Mike,

Just to follow up, We are still slated to test the Jetta Hybrid on Wednesday. Having your people here at 7:00 am is best. If there is a change, I'll call you.

The lab is currently testing the diesel tunnel. Hopefully it will come on line soon. Again, I'll keep you informed as to its status.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>, Jim Snyder/AA/USEPA/US@EPA  
Date: 09/25/2012 10:15 AM  
Subject: VW Schedule - Wednesday

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**Cc:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Sent:** Wed 9/26/2012 11:21:54 PM  
**Subject:** Rescheduled: RE: Audi Meeting with EPA (Oct 29 01:00 PM EDT in AA-601C/AA-OTAQ-LAB@EPA)

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation
- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;Domenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; omenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; othar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; liver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
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**Cc:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 9/26/2012 11:24:44 PM  
**Subject:** Information Update - Subject has changed: Audi Mtg w/ EPA rm 601C

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation
- SFTP II for Interim Tier 3
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Senior Manager  
Emission Regulations and Certification



**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;Domenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; omenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; othar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; liver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Sent:** Wed 9/26/2012 11:24:44 PM  
**Subject:** Information Update - Subject has changed: Audi Mtg w/ EPA rm 601C

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
- Drive Select Mode
- Tier 3 Credit Calculation
- SFTP II for Interim Tier 3
- FFV usage factor for MY 2017 (x % Ethanol = E85 driving)
- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification

**To:** CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;Domenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; omenic.Rist@audi.de;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; othar.Rech@AUDI.DE;Oliver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; liver.Schmidt@vw.com;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Sent:** Wed 9/26/2012 11:24:44 PM  
**Subject:** Information Update - Subject has changed: Audi Mtg w/ EPA rm 601C

- Field Survey for Idle Start Stop
- Idle Start / Stop – 2nd Generation
- Idle Start / Stop with Default on vs. Last Mode
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- Label Calculation

Please let me know if you, and other EPA staff that you think should be involved, are available.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Schmidt, Oliver (EEO)"  
**Sent:** Wed 9/26/2012 11:42:55 PM  
**Subject:** Tentative: Audi Mtg w/ EPA rm 601C

**To:** DavidA Wright/AA/USEPA/US@EPA[]  
**Cc:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 9/27/2012 12:54:34 PM  
**Subject:** VW Group - Friday Beetle Test Visit  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[image001.gif](#)

Hello David,

I understand you are now our backup for Jim, who will be out beginning Friday.

Our colleagues are planning to be at your lab Friday for the start of testing for the Beetle TDI. Our normal lab visit contact person is Vince Mazaitis. We usually need to be there at 7:00 am to see the tests; are you available at this time in case Vince is still out?

Thanks,

Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, September 12, 2012 8:34 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder; William Ott; Chris Nevers  
Subject: RE: Request for US06 Drive Trace

Mike,

Thank you for your response. I am wondering, if per our original request, if the factory has any 10 hz data, or if the only data available are 1 hz?

EPA may be requesting additional drive trace data from certification tests in the future and will be requesting the data in the format specified by SAEJ2951. Please do not hesitate to contact me if you require additional information or have further questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

"Giles, Michael (EEO)" ---09/05/2012 08:36:55 AM---Hello David, Please find attached the drive trace that the factory provided for this test.

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 09/05/2012 08:36 AM  
Subject: RE: Request for US06 Drive Trace

Hello David,

Please find attached the drive trace that the factory provided for this test.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, August 23, 2012 9:09 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: RE: Request for US06 Drive Trace

Mike,

Thanks for your reply, I look forward to receiving the data once it has been provided by the factory. Please let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

"Giles, Michael (EEO)" ---08/23/2012 08:05:42 AM---David, I have forwarded your request to our factory and will reply with the information as soon as i

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/23/2012 08:05 AM  
Subject: RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, August 22, 2012 3:54 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace

Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\* [attachment

"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 9/27/2012 2:48:47 PM  
**Subject:** VW Group - Hybrid

Hi Jim,

Please do not release the Hybrid yet. There is discussion about requesting a retest. We will let you know.

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229


FAX +1-248-754-4207



**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/27/2012 4:56:00 PM  
**Subject:** Jetta hybrid results  
2013 jetta hybrid results.pdf

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

CERT

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0257-012			Vehicle ID: 361 730 136/13				
	<b>Test Information</b>		Test Date: 9/26/2012		MFR Name VOLKSWAGEN		
	Key Start / Hot Soak: 08:03:39 / 09:53				MFR Codes: 590 VWX		
	Fuel Container ID: F00023				Config #: 00		
	Fuel Type: 61 Tier 2 Cert Test Fuel				Transmission: AUTO		
	Test Procedure: 21.04 Fed Fuel 2-day Exhaust (CAN LOAD)				Shift Schedule: A09980005		
	Calculation Method: Gasoline				Beginning Odometer: 009468.0 KM		
Pretest Remarks:					Drive Schedule: ftp4bag		
					Soak Period: 20.2 hours		
<b>Bag Data</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
<b>Phase 1</b>							
Sample		6.005	19.678	0.805	0.809	2.445	
Ambient		3.025	0.381	0.017	0.047	2.128	
Net Concentration		3.164	19.320	0.789	0.765	0.445	2.675
Remarks:							
<b>Phase 2</b>							
Sample		3.067	1.963	0.008	0.298	2.124	
Ambient		2.911	0.398	0.017	0.046	2.104	
Net Concentration		0.221	1.574	-0.009	0.253	0.067	0.147
Remarks:							
<b>Phase 3</b>							
Sample		3.352	11.617	0.184	0.713	2.296	
Ambient		2.887	0.521	0.016	0.045	2.103	
Net Concentration		0.619	11.124	0.169	0.670	0.304	0.285
Remarks:							
<b>Phase 4</b>							
Sample		2.981	1.525	0.015	0.279	2.126	
Ambient		2.872	0.564	0.008	0.045	2.109	
Net Concentration		0.169	0.973	0.007	0.234	0.060	0.103
Remarks:							
<b>Results</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
Phase 1		0.030	0.366	0.022	227.8	0.005	0.025 / 0.026
Phase 2		0.003	0.047	0.000	119.8	0.001	0.002 / 0.002
Phase 3		0.006	0.210	0.005	198.6	0.003	0.003 / 0.003
Phase 4		0.003	0.029	0.000	110.4	0.001	0.002 / 0.002
							(NMOG=1.04xNMHC)
Weighted		0.00921	0.15246	0.00603	160.978	0.00247	0.0069 / 0.0071
<b>Fuel Economy</b>							
		<u>Gasoline MPG</u>				<u>Dyno Settings</u>	<u>Dyno #:</u> D002
Phase 1		39.08					Inertia: 3625
Phase 2		74.44					EPA Set Co A: 7.3499999
Phase 3		44.88					EPA Set Co B: 0.0141
Phase 4		80.81	<u>1% SOC Limit</u>	<u>Act SOC A-hr</u>	<u>Sys Nom Volts</u>	<u>Charge State</u>	EPA Set Co C: 0.01545
			0.4107	0.022	220.0	Pass	
Weighted		55.36					Emiss-Bench: D002

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BATCH: 20120926075303

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# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0257-012

Vehicle ID: 361 730 136/13

Results	HC-FID	CO	NOx	CO2	CH4	NMHC	Meth Response
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	1.098
Phase 1	0.106	1.311	0.080	815.6	0.017	0.090	
Phase 2	0.013	0.183	0.000	462.7	0.004	0.008	
Phase 3	0.021	0.754	0.017	713.5	0.012	0.010	
Phase 4	0.010	0.113	0.001	427.9	0.004	0.006	



## Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.96	28.96	28.96	28.96
Avg Cell Temp (degF)	75.17	75.15	75.23	75.11
Dew Point (degF)	49.43	49.34	49.43	49.43
Specific Humidity (grains/lbm)	54.17	53.98	54.17	54.17
NOx Corr Factor	0.9108	0.9101	0.9108	0.9108
CO2 Dilution Factor	16.515	44.909	18.746	48.01
CFV Vmix (scf @68F)	2057.95	3524.63	2054.63	3523.71
CVS Flow Rate Avg (scfm)	242.97	240.29	242.86	242.99
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	508.21	870.10	507.60	870.10
Distance (miles)	3.581	3.861	3.593	3.875
Bag Analysis Time (secs)	74.9	87.7	74.5	75.6

## MFR Test Results

for Procedure 21 Federal fuel 2-day exhaust (w/can load)

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.007	0.178	0.0061	155	0	0.0046

Odometer  
9082 K

MPG  
57.2


MPG is 3.33 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1


Dyno: 21

Fuel: 61 Tier 2 Cert Gasoline


QERT

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0257-011				Vehicle ID: 361 730 136/13			
 <b>Test Information</b>	Test Date: 9/26/2012		MFR Name VOLKSWAGEN				
	Key Start: 09:50:26		MFR Codes: 590 VWX				
	Fuel Container ID: F00023		Config #: 00				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO				
	Test Procedure: 03 HWFET (hwfetprep_hwfet)		Shift Schedule: A09980011				
	Calculation Method: Gasoline		Beginning Odometer: 009492.0 KM				
	Pretest Remarks: ODO in kilometers		Drive Schedule: hwfet_hwfet				
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	3.097	12.737	0.034	0.926	2.017		
Ambient	3.071	1.194	0.024	0.047	2.121		
Net Concentration	0.238	11.626	0.012	0.882	0.042	0.191	
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.001	0.115	0.000	136.8	0.000	0.001 / 0.001	65.327
(NMOG=1.04xNMHC)							
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>	<u>Coastdown secs:</u>	23.66	<u>Dyno Settings</u>	<u>Dyno #:</u> D002		
Phase 1	65.18		23.68		Inertia: 3625		
			23.73		EPA Set Co A: 7.3499999		
					EPA Set Co B: 0.0141		
					EPA Set Co C: 0.01545		
	<u>1% SOC Limit</u>	<u>Act SOC A-hr</u>	<u>Sys Nom Volts</u>	<u>Charge State</u>			
	0.2408	0.1246	220.0	Pass			
			23.69		Emiss-Bench: D002		

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NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0257-011				Vehicle ID: 361 730 136/13			
<b>Results</b>	<u>HC-FID</u> (grams)	<u>CO</u> (grams)	<u>NOx</u> (grams)	<u>CO2</u> (grams)	<u>CH4</u> (grams)	<u>NMHC</u> (grams)	<u>Meth Response</u>
 Phase 1	0.012	1.179	0.002	1405.4	0.002	0.010	1.098
<b>Test Conditions</b>							
	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>			
Barometer (inHg)	28.97						
Avg Cell Temp (degF)	75.17						
Dew Point (degF)	49.43						
Specific Humidity (grains/lbm)	54.13						
NOx Corr Factor	0.9107						
CO2 Dilution Factor	14.451						
CFV Vmix (scf @68F)	3075.25						
CVS Flow Rate Avg (scfm)	241.20						
Fan Placement: One Fan - Up - Front							
Phase Time (secs)	765.01						
Distance (miles)	10.275						
Bag Analysis Time (secs)	75.0						
<b>MFR Test Results</b> for Procedure 3 HWFE							
<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>	
1E+07	0.0016	0.141	0.0077	134	0	0.001	
<u>Odometer</u>	<u>MPG</u>	MFR Lab: Volkswagen AG, Dept EASZ/1					
9106 K	66.2	Dyno: 21					
MPG is 1.57 % higher than EPA MPG		Fuel: 61 Tier 2 Cert Gasoline					

CE12T

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0257-013				Vehicle ID: 361 730 136/13			
	<b>Test Information</b>		Test Date: 9/26/2012		MFR Name: VOLKSWAGEN		
			Key Start: 10:38:19		MFR Codes: 590		VWX
			Fuel Container ID: F00023		Config #: 00		
			Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO		
			Test Procedure: 89 us062bag (us06warmup_2bagus06)		Shift Schedule: A09980041		
			Calculation Method: Gasoline		Beginning Odometer: 009533.0 KM		
			Pretest Remarks: odo in kilometers		Drive Schedule: us06warmup_2bagus06		
<hr/>							
<b>Bag Data</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
<b>Phase 1</b>		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample		3.340	20.247	1.838	0.886	2.122	
Ambient		2.946	0.512	0.006	0.046	2.084	
Net Concentration		0.589	19.769	1.832	0.842	0.175	0.396
Remarks:							
<b>Phase 2</b>							
Sample		3.599	76.308	0.503	0.983	2.257	
Ambient		2.875	0.561	0.015	0.046	2.086	
Net Concentration		0.936	75.788	0.488	0.940	0.325	0.579
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
Phase 1		0.008	0.543	0.075	363.9	0.003	0.005 / 0.006
Phase 2		0.006	0.914	0.009	178.1	0.002	0.003 / 0.004
Composite		0.00613	0.83125	0.02364	219.496	0.00236	0.0039 / 0.0040
		(NMOG=1.04xNMHC)					
<b>Fuel Economy</b>		<u>Gasoline MPG</u>			<u>Dyno Settings</u>	<u>Dyno #:</u> D002	
Phase 1		24.47					Inertia: 3625
Phase 2		49.73					EPA Set Co A: 7.3499999
			<u>1% SOC Limit</u>	<u>Act SOC A-hr</u>	<u>Sys Nom Volts</u>	<u>Charge State</u>	EPA Set Co B: 0.0141
			0.3026	-0.1143	220.0	Pass	EPA Set Co C: 0.01545
Composite		40.52					Emiss-Bench: D002

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0257-013

Vehicle ID: 361 730 136/13

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.014	0.974	0.135	652.3	0.005	0.010	1.098
Phase 2	0.035	5.708	0.055	1112.3	0.014	0.022	



## Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.99	28.99		
Avg Cell Temp (degF)	74.88	75.49		
Dew Point (degF)	49.33	49.43		
Specific Humidity (grains/lbm)	53.90	54.11		
NOx Corr Factor	0.9098	0.9106		
CO2 Dilution Factor	15.090	13.526		
CFV Vmix (scf @68F)	1494.68	2284.53		

CVS Flow Rate Avg (scfm) 376.34 375.54

Fan Placement: USO6 Only - One Large Fan - Up - Front

Phase Time (secs)	130.10	365.00	108.20
Distance (miles)	1.793	6.247	
Bag Analysis Time (secs)	79.7	265.0	

## MFR Test Results

for Procedure 90 US06

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0015	0.009	0.034	201	0	0.0007

Odometer 9143 K  
MPG 44.2 PM  
MPG is 9.09 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1


Dyno: 21  
Fuel: 61 Tier 2 Cert Gasoline

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/27/2012 4:56:00 PM  
**Subject:** Jetta hybrid results  
[2013 jetta hybrid results.pdf](#)

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov



CERT

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0257-012				Vehicle ID: 361 730 136/13			
	<b>Test Information</b>		Test Date: 9/26/2012		MFR Name VOLKSWAGEN		
	Key Start / Hot Soak: 08:03:39 / 09:53				MFR Codes: 590 VWX		
	Fuel Container ID: F00023				Config #: 00		
	Fuel Type: 61 Tier 2 Cert Test Fuel				Transmission: AUTO		
	Test Procedure: 21.04 Fed Fuel 2-day Exhaust (CAN LOAD)				Shift Schedule: A09980005		
	Calculation Method: Gasoline				Beginning Odometer: 009468.0 KM		
Pretest Remarks:				Drive Schedule: ftp4bag			
				Soak Period: 20.2 hours			
<b>Bag Data</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
<b>Phase 1</b>							
Sample		6.005	19.678	0.805	0.809	2.445	
Ambient		3.025	0.381	0.017	0.047	2.128	
Net Concentration		3.164	19.320	0.789	0.765	0.445	2.675
Remarks:							
<b>Phase 2</b>							
Sample		3.067	1.963	0.008	0.298	2.124	
Ambient		2.911	0.398	0.017	0.046	2.104	
Net Concentration		0.221	1.574	-0.009	0.253	0.067	0.147
Remarks:							
<b>Phase 3</b>							
Sample		3.352	11.617	0.184	0.713	2.296	
Ambient		2.887	0.521	0.016	0.045	2.103	
Net Concentration		0.619	11.124	0.169	0.670	0.304	0.285
Remarks:							
<b>Phase 4</b>							
Sample		2.981	1.525	0.015	0.279	2.126	
Ambient		2.872	0.564	0.008	0.045	2.109	
Net Concentration		0.169	0.973	0.007	0.234	0.060	0.103
Remarks:							
<b>Results</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
Phase 1		0.030	0.366	0.022	227.8	0.005	0.025 / 0.026
Phase 2		0.003	0.047	0.000	119.8	0.001	0.002 / 0.002
Phase 3		0.006	0.210	0.005	198.6	0.003	0.003 / 0.003
Phase 4		0.003	0.029	0.000	110.4	0.001	0.002 / 0.002
							(NMOG=1.04xNMHC)
Weighted		0.00921	0.15246	0.00603	160.978	0.00247	0.0069 / 0.0071
<b>Fuel Economy</b>							
		<u>Gasoline MPG</u>				<u>Dyno Settings</u>	<u>Dyno #:</u> D002
Phase 1		39.08					Inertia: 3625
Phase 2		74.44					EPA Set Co A: 7.3499999
Phase 3		44.88					EPA Set Co B: 0.0141
Phase 4		80.81	<u>1% SOC Limit</u>	<u>Act SOC A-hr</u>	<u>Sys Nom Volts</u>	<u>Charge State</u>	EPA Set Co C: 0.01545
			0.4107	0.022	220.0	Pass	
Weighted		55.36					Emiss-Bench: D002

v120518 - d002 EPAVDAEm120926075303

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BATCH: 20120926075303

Print Time 26-Sep-2012 15:25

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0257-012

Vehicle ID: 361 730 136/13

Results	HC-FID	CO	NOx	CO2	CH4	NMHC	Meth Response
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	1.098
Phase 1	0.106	1.311	0.080	815.6	0.017	0.090	
Phase 2	0.013	0.183	0.000	462.7	0.004	0.008	
Phase 3	0.021	0.754	0.017	713.5	0.012	0.010	
Phase 4	0.010	0.113	0.001	427.9	0.004	0.006	



## Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.96	28.96	28.96	28.96
Avg Cell Temp (degF)	75.17	75.15	75.23	75.11
Dew Point (degF)	49.43	49.34	49.43	49.43
Specific Humidity (grains/lbm)	54.17	53.98	54.17	54.17
NOx Corr Factor	0.9108	0.9101	0.9108	0.9108
CO2 Dilution Factor	16.515	44.909	18.746	48.01
CFV Vmix (scf @68F)	2057.95	3524.63	2054.63	3523.71
CVS Flow Rate Avg (scfm)	242.97	240.29	242.86	242.99
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	508.21	870.10	507.60	870.10
Distance (miles)	3.581	3.861	3.593	3.875
Bag Analysis Time (secs)	74.9	87.7	74.5	75.6

## MFR Test Results

for Procedure 21 Federal fuel 2-day exhaust (w/can load)

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.007	0.178	0.0061	155	0	0.0046

Odometer  
9082 K

MPG  
57.2


MPG is 3.33 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21

Fuel: 61 Tier 2 Cert Gasoline

QERT

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0257-011				Vehicle ID: 361 730 136/13			
 <b>Test Information</b>	Test Date: 9/26/2012		MFR Name VOLKSWAGEN				
	Key Start: 09:50:26		MFR Codes: 590 VWX				
	Fuel Container ID: F00023		Config #: 00				
	Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO				
	Test Procedure: 03 HWFET (hwfetprep_hwfet)		Shift Schedule: A09980011				
	Calculation Method: Gasoline		Beginning Odometer: 009492.0 KM				
	Pretest Remarks: ODO in kilometers		Drive Schedule: hwfet_hwfet				
<b>Bag Data</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	3.097	12.737	0.034	0.926	2.017		
Ambient	3.071	1.194	0.024	0.047	2.121		
Net Concentration	0.238	11.626	0.012	0.882	0.042	0.191	
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.001	0.115	0.000	136.8	0.000	0.001 / 0.001	65.327
(NMOG=1.04xNMHC)							
<b>Fuel Economy</b>							
	<u>Gasoline MPG</u>	<u>Coastdown secs:</u>	23.66	<u>Dyno Settings</u>	Dyno #: D002		
Phase 1	65.18		23.68		Inertia: 3625		
			23.73		EPA Set Co A: 7.3499999		
					EPA Set Co B: 0.0141		
					EPA Set Co C: 0.01545		
	<u>1% SOC Limit</u>	<u>Act SOC A-hr</u>	Sys Nom Volts	<u>Charge State</u>			
	0.2408	0.1246	220.0	Pass			
			23.69		Emiss-Bench: D002		

v120518 - d002 EPAVDAEm120926092129

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Print Time 26-Sep-2012 15:27

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0257-011

Vehicle ID: 361 730 136/13

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.012	1.179	0.002	1405.4	0.002	0.010	1.098



### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.97			
Avg Cell Temp (degF)	75.17			
Dew Point (degF)	49.43			
Specific Humidity (grains/lbm)	54.13			
NOx Corr Factor	0.9107			
CO2 Dilution Factor	14.451			
CFV Vmix (scf @68F)	3075.25			

CVS Flow Rate Avg (scfm) 241.20

Fan Placement: One Fan - Up - Front

Phase Time (secs)	765.01
Distance (miles)	10.275
Bag Analysis Time (secs)	75.0

### MFR Test Results

for Procedure 3 HWFE

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0016	0.141	0.0077	134	0	0.001

Odometer  
9106 K

MPG  
66.2


MPG is 1.57 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21

Fuel: 61 Tier 2 Cert Gasoline

CE12T

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0257-013				Vehicle ID: 361 730 136/13			
	<b>Test Information</b>		Test Date: 9/26/2012		MFR Name: VOLKSWAGEN		
			Key Start: 10:38:19		MFR Codes: 590 VWX		
			Fuel Container ID: F00023		Config #: 00		
			Fuel Type: 61 Tier 2 Cert Test Fuel		Transmission: AUTO		
			Test Procedure: 89 us062bag (us06warmup_2bagus06)		Shift Schedule: A09980041		
			Calculation Method: Gasoline		Beginning Odometer: 009533.0 KM		
			Pretest Remarks: odo in kilometers		Drive Schedule: us06warmup_2bagus06		
<b>Bag Data</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
<b>Phase 1</b>		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample		3.340	20.247	1.838	0.886	2.122	
Ambient		2.946	0.512	0.006	0.046	2.084	
Net Concentration		0.589	19.769	1.832	0.842	0.175	0.396
Remarks:							
<b>Phase 2</b>							
Sample		3.599	76.308	0.503	0.983	2.257	
Ambient		2.875	0.561	0.015	0.046	2.086	
Net Concentration		0.936	75.788	0.488	0.940	0.325	0.579
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Results</b>		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
Phase 1		0.008	0.543	0.075	363.9	0.003	0.005 / 0.006
Phase 2		0.006	0.914	0.009	178.1	0.002	0.003 / 0.004
Composite		0.00613	0.83125	0.02364	219.496	0.00236	(NMOG=1.04xNMHC) 0.0039 / 0.0040
<b>Fuel Economy</b>		<u>Gasoline MPG</u>			<u>Dyno Settings</u>	<u>Dyno #:</u> D002	
Phase 1		24.47				Inertia: 3625	
Phase 2		49.73				EPA Set Co A: 7.3499999	
			<u>1% SOC Limit</u>	<u>Act SOC A-hr</u>	<u>Sys Nom Volts</u>	<u>Charge State</u>	EPA Set Co B: 0.0141
			0.3026	-0.1143	220.0	Pass	EPA Set Co C: 0.01545
Composite		40.52					Emiss-Bench: D002

# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0257-013

Vehicle ID: 361 730 136/13

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.014	0.974	0.135	652.3	0.005	0.010	1.098
Phase 2	0.035	5.708	0.055	1112.3	0.014	0.022	



## Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.99	28.99		
Avg Cell Temp (degF)	74.88	75.49		
Dew Point (degF)	49.33	49.43		
Specific Humidity (grains/lbm)	53.90	54.11		
NOx Corr Factor	0.9098	0.9106		
CO2 Dilution Factor	15.090	13.526		
CFV Vmix (scf @68F)	1494.68	2284.53		

CVS Flow Rate Avg (scfm) 376.34 375.54

Fan Placement: USO6 Only - One Large Fan - Up - Front

Phase Time (secs)	130.10	365.00	108.20
Distance (miles)	1.793	6.247	
Bag Analysis Time (secs)	79.7	265.0	

## MFR Test Results

for Procedure 90 US06

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0015	0.009	0.034	201	0	0.0007

Odometer 9143 K  
MPG 44.2 PM  
MPG is 9.09 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21  
Fuel: 61 Tier 2 Cert Gasoline

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Thur 9/27/2012 6:06:37 PM  
**Subject:** Re: VW Group - Friday Beetle Test Visit  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
(embedded image)  
(embedded image)

Yes I will be in the office tomorrow morning at 7 am. If you cannot reach me when you arrive, you can also ask to see David VanAmburg. Let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>, "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, Jim Snyder/AA/USEPA/US@EPA  
Date: 09/27/2012 08:54 AM  
Subject: VW Group - Friday Beetle Test Visit

Hello David,

I understand you are now our backup for Jim, who will be out beginning Friday.

Our colleagues are planning to be at your lab Friday for the start of testing for the Beetle TDI. Our normal lab visit contact person is Vince Mazaitis. We usually need to be there at 7:00 am to see the tests; are you available at this time in case Vince is still out?

Thanks,

Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, September 12, 2012 8:34 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder; William Ott; Chris Nevers  
Subject: RE: Request for US06 Drive Trace

Mike,

Thank you for your response. I am wondering, if per our original request, if the factory has any 10 hz data, or if the only data available are 1 hz?

EPA may be requesting additional drive trace data from certification tests in the future and will be requesting the data in the format specified by SAEJ2951. Please do not hesitate to contact me if you require additional information or have further questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

"Giles, Michael (EEO)" ---09/05/2012 08:36:55 AM---Hello David, Please find attached the drive trace that the factory provided for this test.

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 09/05/2012 08:36 AM  
Subject: RE: Request for US06 Drive Trace

Hello David,

Please find attached the drive trace that the factory provided for this test.

Regards,  
Mike



From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, August 23, 2012 9:09 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: RE: Request for US06 Drive Trace  
Mike,

Thanks for your reply, I look forward to receiving the data once it has been provided by the factory. Please let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

"Giles, Michael (EEO)" ---08/23/2012 08:05:42 AM---David, I have forwarded your request to our factory and will reply with the information as soon as i

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/23/2012 08:05 AM  
Subject: RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, August 22, 2012 3:54 PM

To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace  
Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\* [attachment

"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

**To:** DavidA Wright/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 9/27/2012 6:22:35 PM  
**Subject:** RE: VW Group - Friday Beetle Test Visit  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[juergen.peter@volkswagen.de](mailto:juergen.peter@volkswagen.de)  
[hannah.schlueter@volkswagen.de](mailto:hannah.schlueter@volkswagen.de)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[image001.gif](#)

Thank you David!

From: DavidA Wright [<mailto:Wright.DavidA@epamail.epa.gov>]  
Sent: Thursday, September 27, 2012 2:07 PM  
To: Giles, Michael (EEO)  
Cc: Schlueter, Hannah (EASZ/1); Jim Snyder; Peter, Juergen (EASZ/1)  
Subject: Re: VW Group - Friday Beetle Test Visit

Yes I will be in the office tomorrow morning at 7 am. If you cannot reach me when you arrive, you can also ask to see David VanAmburg. Let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:[wright.davida@epa.gov](mailto:wright.davida@epa.gov)

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"Giles, Michael (EEO)" ---09/27/2012 08:54:38 AM---Hello David, I understand you are now our backup for Jim, who will be out beginning Friday.

From: "Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>  
To: DavidA Wright/AA/USEPA/US@EPA

Cc: "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>, "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, Jim Snyder/AA/USEPA/US@EPA  
Date: 09/27/2012 08:54 AM  
Subject: VW Group - Friday Beetle Test Visit

Hello David,

I understand you are now our backup for Jim, who will be out beginning Friday.

Our colleagues are planning to be at your lab Friday for the start of testing for the Beetle TDI. Our normal lab visit contact person is Vince Mazaitis. We usually need to be there at 7:00 am to see the tests; are you available at this time in case Vince is still out?

Thanks,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, September 12, 2012 8:34 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder; William Ott; Chris Nevers  
Subject: RE: Request for US06 Drive Trace

Mike,

Thank you for your response. I am wondering, if per our original request, if the factory has any 10 hz data, or if the only data available are 1 hz?

EPA may be requesting additional drive trace data from certification tests in the future and will be requesting the data in the format specified by SAEJ2951. Please do not hesitate to contact me if you require additional information or have further questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

"Giles, Michael (EEO)" ---09/05/2012 08:36:55 AM---Hello David, Please find attached the drive trace that the

factory provided for this test.

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 09/05/2012 08:36 AM  
Subject: RE: Request for US06 Drive Trace

Hello David,

Please find attached the drive trace that the factory provided for this test.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, August 23, 2012 9:09 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: RE: Request for US06 Drive Trace

Mike,

Thanks for your reply, I look forward to receiving the data once it has been provided by the factory. Please let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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"Giles, Michael (EEO)" ---08/23/2012 08:05:42 AM---David, I have forwarded your request to our factory and will

reply with the information as soon as i

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/23/2012 08:05 AM  
Subject: RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, August 22, 2012 3:54 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace

Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\* [attachment  
"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 9/27/2012 10:35:10 PM  
**Subject:** Volkswagen Alternate Canister Loading Procedure  
Canister Loading Procedure.pdf

Hello Jim:

Attached is an advance copy of our formal request for approval of the Volkswagen alternate canister loading procedure. This was the subject of our meeting on September 20, 2012. I will also submit an electronic version ASAP.

Thanks again for meeting with us.

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com



# VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder  
Compliance and Innovation Strategies Division  
Office of Mobile Sources  
U. S. Environmental Protection Agency  
2000 Traverwood Dr.  
Ann Arbor, Michigan 48105

Leonard W. Kata Name  
Senior Manager Title  
EEO Department  
248-754-4204 Phone  
248-754-4207 Fax  
[leonard.kata@vw.com](mailto:leonard.kata@vw.com) E-Mail

September 27, 2012 Date

Subject: Request for Use of Alternative Evaporative Canister Loading Procedure

VOLKSWAGEN GROUP OF AMERICA, INC.  
3800 HAMLIN ROAD  
AUBURN HILLS, MI 48326  
PHONE +1 248 754 5000

Dear Jim:

On September 20, 2012, representatives from Volkswagen AG and Volkswagen Group of America, Inc., met with you and other EPA staff to request the use of an alternate carbon canister loading procedure. The proposed procedure is patterned after the procedure for off-vehicle charge capable hybrid electric vehicles with non-integrated refuelling canister-only systems, as described in the California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles (amended March 22, 2012).

The request is described in the attached presentation material, which was provided to the agency at the September 20, 2012 meeting. The alternate procedure is intended for use on future model vehicles. This would be limited to conventional and hybrid vehicles that are equipped with non-integrated refueling emission control systems.

Please notify me if further clarification is required. I look forward to your response to this request.

Sincerely,  
VOLKSWAGEN GROUP OF AMERICA, INC.



Leonard W. Kata  
Senior Manager  
Engineering and Environmental Office

Enclosure

# Ex. 4 - CBI

# Ex. 4 - CBI

# Ex. 4 - CBI

# Ex. 4 - CBI

# **Ex. 4 - CBI**

# Ex. 4 - CBI

# Ex. 4 - CBI



**To:** nick@ichikawa.tec.toyota.co.jp[nick@ichikawa.tec.toyota.co.jp];  
 ishii@ntsel.go.jp>;[oliver.moersch@daimler.com];  
 oliver.moersch@daimler.com>;[covadonga.astorga-llorens@jrc.ec.europa.eu];  
 covadonga.astorga-llorens@jrc.ec.europa.eu>;[konrad.kolesa@audi.de];  
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 online.de>;[Heinz.Steven@t-online.de]; Heinz.Steven@t-  
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 trt.engineer@googlemail.com>;[nikolaus.steining@ec.europa.eu];  
 nikolaus.steining@ec.europa.eu>;[christoph.albus@bmrvs.bund.de];  
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 Chris.Parkin@df.gsi.gov.uk>;[narusawa@ntsel.go.jp];  
 narusawa@ntsel.go.jp>;[nakhawa.ecl@araiindia.com];  
 nakhawa.ecl@araiindia.com>;[Romain.Hubert@unece.org];  
 Romain.Hubert@unece.org>;[Pierpaolo.Cazzola@unece.org];  
 Pierpaolo.Cazzola@unece.org>;[ARijnders@rdw.nl]; ARijnders@rdw.nl>;[hschmidt@tuev-  
 nord.de]; hschmidt@tuev-nord.de>;[dirk.d.baeuchle@daimler.com];  
 dirk.d.baeuchle@daimler.com>;[kamal.charafeddine@porsche.de];  
 kamal.charafeddine@porsche.de>;[iddo@sidekickprojects.nl];  
 iddo@sidekickprojects.nl>;[john.may@aecc.be];  
 john.may@aecc.be>;[stephan.hartmann@volkswagen.de];  
 stephan.hartmann@volkswagen.de>;[detlef.stendel@volkswagen.de];  
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 thaniu@jari.or.jp>;[yuichi\_aoyama@n.t.rd.honda.co.jp];  
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antonio.erario@mit.gov.it>;[arjan.dijkhuizen@toyota-europe.com]; arjan.dijkhuizen@toyota-europe.com>;[arnaud.duvielguerbigny@aegpl.be]; arnaud.duvielguerbigny@aegpl.be>;[aurelia.buzgan@rarom.ro]; aurelia.buzgan@rarom.ro>;[b07@mfa.gr]; b07@mfa.gr>;[barouch.giechaskiel@avl.com]; barouch.giechaskiel@avl.com>;[bernard.gauvin@developpement-durable.gouv.fr]; bernard.gauvin@developpement-durable.gouv.fr>;[bernd.fusshoeller@delphi.com]; bernd.fusshoeller@delphi.com>;[bjarman@iangv.org]; bjarman@iangv.org>;[bondm@sabs.co.za]; bondm@sabs.co.za>;[brian.c.doll@exxonmobil.com]; brian.c.doll@exxonmobil.com>;[celine.vallaude@utac.com]; celine.vallaude@utac.com>;William Charmley/AA/USEPA/US@EPA;[chaudhari.ecl@araiindia.com]; illiam Charmley/AA/USEPA/US@EPA;[chaudhari.ecl@araiindia.com]; chaudhari.ecl@araiindia.com>;[chenqs@tsinghua.edu.cn]; chenqs@tsinghua.edu.cn>;[christian.bach@empa.ch]; christian.bach@empa.ch>;[christian.hartmann@maha.de]; christian.hartmann@maha.de>;[christoph.saaelfeld@daimler.com]; christoph.saaelfeld@daimler.com>;[coonsm@tc.gc.ca]; coonsm@tc.gc.ca>;[cornetti@iol.it]; cornetti@iol.it>;[costanza.testino@libero.it]; costanza.testino@libero.it>;Chris Laroo/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;Cleophas Jackson/AA/USEPA/US@EPA;[daniel.hitzler@maha.de]; hris Laroo/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;Cleophas Jackson/AA/USEPA/US@EPA;[daniel.hitzler@maha.de]; hris Nevers/AA/USEPA/US@EPA;Cleophas Jackson/AA/USEPA/US@EPA;[daniel.hitzler@maha.de]; leophas Jackson/AA/USEPA/US@EPA;[daniel.hitzler@maha.de]; daniel.hitzler@maha.de>;[daniel.kopaczewski@developpement-durable.gouv.fr]; daniel.kopaczewski@developpement-durable.gouv.fr>;Maureen Delaney/DC/USEPA/US@EPA;[de\_theux\_frederic@cat.com]; aureen Delaney/DC/USEPA/US@EPA;[de\_theux\_frederic@cat.com]; de\_theux\_frederic@cat.com>;[director@araiindia.com]; director@araiindia.com>;[dleveratto@oica.net]; dleveratto@oica.net>;[doi@jasic.org]; doi@jasic.org>;[ed.crupi@ec.gc.ca]; ed.crupi@ec.gc.ca>;[efernandez@appluscorp.com]; efernandez@appluscorp.com>;[elisa.dumitrescu@unep.org]; elisa.dumitrescu@unep.org>;[erik.figenbaum@vegvesen.no]; erik.figenbaum@vegvesen.no>;[erwin.segers@honda-eu.com]; erwin.segers@honda-eu.com>;[espena@vegvesen.no]; espena@vegvesen.no>;[eva.iverfeldt@scania.com]; eva.iverfeldt@scania.com>;Ed Nam/AA/USEPA/US@EPA;[fakmadza@hyundai-europe.com]; d Nam/AA/USEPA/US@EPA;[fakmadza@hyundai-europe.com]; fakmadza@hyundai-europe.com>;[fcagnolati@landi.it]; fcagnolati@landi.it>;[ferenc.pekar@ec.europa.eu]; ferenc.pekar@ec.europa.eu>;[figegmbh@aol.com]; figegmbh@aol.com>;[flavio.mariani@eni.it]; flavio.mariani@eni.it>;[Fehmi.Akgun@mam.gov.tr]; Fehmi.Akgun@mam.gov.tr>;[gascar@korea.ac.kr]; gascar@korea.ac.kr>;[georges.verdon@bluewin.ch]; georges.verdon@bluewin.ch>;[gerben.passier@tno.nl]; gerben.passier@tno.nl>;[gerhard.gissibl@bmw.de]; gerhard.gissibl@bmw.de>;[giampiero.brusaglino@crf.it]; giampiero.brusaglino@crf.it>;[giorgio.billi@unacoma.it]; giorgio.billi@unacoma.it>;[giorgio.martini@jrc.it]; giorgio.martini@jrc.it>;[giovanni.de-santi@ec.europa.eu]; giovanni.de-santi@ec.europa.eu>;[giovanni.margaria@iveco.com]; giovanni.margaria@iveco.com>;[gk.sharma@natrip.in]; gk.sharma@natrip.in>;[guenter.hoermandinger@ec.europa.eu]; guenter.hoermandinger@ec.europa.eu>;[h-yamada@ntsel.go.jp]; h-yamada@ntsel.go.jp>;[hager@hol.gr]; hager@hol.gr>;[hakan.johansson@vv.se]; hakan.johansson@vv.se>;John Hannon/DC/USEPA/US@EPA;[hans-rudolf.hein@bridgestone.eu]; ohn Hannon/DC/USEPA/US@EPA;[hans-rudolf.hein@bridgestone.eu]; hans-rudolf.hein@bridgestone.eu>;[hathai@tisi.go.th]; hathai@tisi.go.th>;[Heinz.Berger@astra.admin.ch]; Heinz.Berger@astra.admin.ch>;[henk.baarbe@minvrom.nl];

henk.baarbe@minvrom.nl>;[henk.j.dekker@tno.nl];  
 henk.j.dekker@tno.nl>;[heyuntang@catarc.ac.cn];  
 heyuntang@catarc.ac.cn>;[hidenori.moriya@toyota-europe.com]; hidenori.moriya@toyota-  
 europe.com>;[highband@ts2020.kr]; highband@ts2020.kr>;[hirachan@nracs.org.za];  
 hirachan@nracs.org.za>;[hj.stein@daimler.com];  
 hj.stein@daimler.com>;[horst.wagener@bmw.de]; horst.wagener@bmw.de>;[hted@bis.org.in];  
 hted@bis.org.in>;[hua.lukarlsson@scania.com];  
 hua.lukarlsson@scania.com>;[hypark@katech.re.kr];  
 hypark@katech.re.kr>;[ian.hodgson@ec.europa.eu];  
 ian.hodgson@ec.europa.eu>;[ian.marshall@aeat.co.uk];  
 ian.marshall@aeat.co.uk>;[iangv@iangv.org]; iangv@iangv.org>;[ih@acea.be];  
 ih@acea.be>;[info@federmetano.it]; info@federmetano.it>;[isabelle.guerin@renault.com];  
 isabelle.guerin@renault.com>;[j-teranuma@mail.nissan.co.jp]; j-  
 teranuma@mail.nissan.co.jp>;[j.bozewicz@tdt.pl]; j.bozewicz@tdt.pl>;Cleophas  
 Jackson/AA/USEPA/US@EPA;[jacques.dartoy@total.com]; leophas  
 Jackson/AA/USEPA/US@EPA;[jacques.dartoy@total.com];  
 jacques.dartoy@total.com>;[jacques.marmy@iru.org];  
 jacques.marmy@iru.org>;[jaime.alamo@ngvaeurope.eu];  
 jaime.alamo@ngvaeurope.eu>;[janghyokko@syu.ac.kr];  
 janghyokko@syu.ac.kr>;[jasic@jasic.org]; jasic@jasic.org>;[jcsarbach@fiev.fr];  
 jcsarbach@fiev.fr>;[jean-francois.renaudin@volvo.com]; jean-  
 francois.renaudin@volvo.com>;[jean-francois.roy@ec.gc.ca]; jean-  
 francois.roy@ec.gc.ca>;[jens.huegel@iru.org]; jens.huegel@iru.org>;[jevans@smtt.co.uk];  
 jevans@smtt.co.uk>;[jiaquanli2008@163.com];  
 jiaquanli2008@163.com>;[jiliang@craes.org.cn]; jiliang@craes.org.cn>;[jkubsh@meca.org];  
 jkubsh@meca.org>;[jmandel@emamail.org]; jmandel@emamail.org>;[jnatcws@yahoo.com.cn];  
 jnatcws@yahoo.com.cn>;[jnhai@cnhtc.cn]; jnhai@cnhtc.cn>;[johan.renders@ec.europa.eu];  
 johan.renders@ec.europa.eu>;[jon.andersson@ricardo.com];  
 jon.andersson@ricardo.com>;[jon.real@infrastructure.gov.au];  
 jon.real@infrastructure.gov.au>;[jps@cambustion.co.uk];  
 jps@cambustion.co.uk>;[jps@cambustion.com];  
 jps@cambustion.com>;[jseisler@cleanfuelsconsulting.org];  
 jseisler@cleanfuelsconsulting.org>;[juhani.laurikko@vtt.fi];  
 juhani.laurikko@vtt.fi>;[jwlee@kotsa.or.kr]; jwlee@kotsa.or.kr>;James  
 Sanchez/AA/USEPA/US@EPA;[katrieng@ts2020.kr]; ames  
 Sanchez/AA/USEPA/US@EPA;[katrieng@ts2020.kr];  
 katrieng@ts2020.kr>;[kazunori.kojima@iea.org];  
 kazunori.kojima@iea.org>;[ken.rose@concawe.org];  
 ken.rose@concawe.org>;[kerstin.meyer@transportenvironment.org];  
 kerstin.meyer@transportenvironment.org>;[khrupachna@nami.ru];  
 khrupachna@nami.ru>;[kkgandhi@siam.in]; kkgandhi@siam.in>;[kkokrda@emamail.org];  
 kkokrda@emamail.org>;[klaus.burger@maha.de]; klaus.burger@maha.de>;[komarov@niiat.ru];  
 komarov@niiat.ru>;[ksr@cambustion.co.uk]; ksr@cambustion.co.uk>;[kubota@jasic.org];  
 kubota@jasic.org>;[kvi@autorc.ru]; kvi@autorc.ru>;Karl  
 Simon/DC/USEPA/US@EPA;[l.holmqvist@clepa.be]; arl  
 Simon/DC/USEPA/US@EPA;[l.holmqvist@clepa.be];  
 l.holmqvist@clepa.be>;[lianne.noseworthy@ec.gc.ca];  
 lianne.noseworthy@ec.gc.ca>;[liuxin@tju.edu.cn]; liuxin@tju.edu.cn>;[liwl@petrochina.com.cn];  
 liwl@petrochina.com.cn>;[llezhnev@nami.ru]; llezhnev@nami.ru>;[lschulte@tuev-nord.de];  
 lschulte@tuev-nord.de>;[lubos.trnka@tuv-sud.cz]; lubos.trnka@tuv-  
 sud.cz>;[lubos.trnka@volny.cz]; lubos.trnka@volny.cz>;[luhongyu@catarc.ac.cn];  
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 m.r.stepper@cummins.com>;[m.seifert@svgw.ch]; m.seifert@svgw.ch>;[m.sokolov@autorc.ru];  
 m.sokolov@autorc.ru>;[m.vaysblum@autorc.ru];  
 m.vaysblum@autorc.ru>;[mafh@tsinghua.edu.cn];

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 magnus.lindgren@trafikverket.se>;[manuel.lage@ngvaeurope.eu];  
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 marcin.rychter@its.waw.pl>;[maria.spiliopoulou-kaparia@ec.europa.eu]; maria.spiliopoulou-  
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 oliver.eberhardt@bmu.bund.de>;[p.flanker@denso.nl];  
 p.flanker@denso.nl>;[p.laurent@clepa.be]; p.laurent@clepa.be>;[padro@lanl.gov];  
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 europe.com>;[rob.cox@ipieca.org]; rob.cox@ipieca.org>;[rob.cuelenaere@minvrom.nl];  
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 robert.falk@dft.gsi.gov.uk>;[romain.lamberty@snch.lu];  
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 rsantafe@idiada.com>;[rudi.valgaeren@eur.bosal.com];

rudi.valgaeren@eur.bosal.com>;[rudolf.hummel@jrc.it];  
 rudolf.hummel@jrc.it>;[R.Gense@Pon.nl]; R.Gense@Pon.nl>;[s.piccolo@federchimica.it];  
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 sinopec.com>;[zisis@auth.gr]; zisis@auth.gr>;[Dirk.Bosteels@aecc.eu];  
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 Felix.Reutimann@bafu.admin.ch>[]  
**From:** giovanni.durbano@bafu.admin.ch  
**Sent:** Fri 9/28/2012 8:44:43 AM

**Subject:** DTP11 Wrap-up and Documents - Part I  
[WLTP-DTP-11-12 Wrap-up DTP11.pdf](#)  
[giovanni.durbano@bafu.admin.ch](mailto:giovanni.durbano@bafu.admin.ch)  
<http://www.bafu.admin.ch/air>

Dear Ladies and Gentlemen,

Please find enclosed the Wrap-up as well as all related documents (see \*.zip file) of the 11th DTP meeting held from 25th to 26th September 2012 at JRC in Ispra (I).

The DTP11 documents will be uploaded to circa and UNECE websites as well.

The related documents (\*.zip files) will be sent in two parts.

Best regards,

G. D'Urbano

Giovanni D'Urbano  
dipl. Ing. ETH  
Head of Section

Department of the Environment, Transport,  
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Federal Office for the Environment (FOEN)  
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\*\*\*\*\* ATTACHMENT NOT DELIVERED \*\*\*\*\*

This Email message contained an attachment named  
PostDTP11\_Part\_1.zip  
which may be a computer program. This attached computer program could  
contain a computer virus which could cause harm to EPA's computers,  
network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced  
into the EPA network. EPA is deleting all computer program attachments  
sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you  
should contact the sender and request that they rename the file name  
extension and resend the Email with the renamed attachment. After  
receiving the revised Email, containing the renamed attachment, you can  
rename the file extension to its correct name.

For further information, please contact the EPA Call Center at  
(866) 411-4EPA (4372). The TDD number is (866) 489-4900.

\*\*\*\*\* ATTACHMENT NOT DELIVERED \*\*\*\*\*

The 11th DTP meeting was held on 25<sup>th</sup> to 26<sup>th</sup> of September 2012 at JRC, Ispra, Italy.

### Update from VP2

The VTF coordinator presented the status of Validation Phase 2 (see doc. WLTP-DTP-11-03). Between April and mid-September, several Participating Labs (PL) carried out tests and uploaded the results to the JRC server. These results were collected by Heinz Steven and placed in a database that currently contains data on: conventional vehicles, AP, PM/PN during baseline tests .

H. Steven presented the database and showed how it works.

At beginning of October, new VP2 test results on EV/HEV and PM/PN during regeneration, will be uploaded to the JRC server. This will be followed by the release of a new version of the database that will allow all DTP subgroups to start the analysis of VP2 test results by week 43 of 2012.

By end of October/beginning of November, all remaining VP2 test results currently being performed (ACEA, India, LPVs) will be uploaded to the JRC server or provided directly to Heinz Steven. By mid/end of November respectively, the final version of the VP2 database for ICE/EV vehicles will be prepared and released, allowing the start of the assessment phase of VP2 test results.

In light of the revised timetable for the completion of the experimental part of VP2, the VTF coordinator proposed a new VP2 timetable, ending on week 2 of 2013. According to this new plan, the DTP subgroup and DHC will come to the GRPE conference in Geneva (week 3 of 2013) with a proposal to be presented at the DHC16/DTP12 meetings, just prior to the proper 65<sup>th</sup>-GRPE session.

LabProICE expressed preliminary concerns to fulfil their evaluation tasks in due time.

Concerning Validation 3 (Road Load Determination), which has been included as a parallel activity within VP2, while acknowledging the Japanese proposal (WLTP-DTP-LabProICE-143) , the DTP group asked that two additional issues be put under the scope of Validation 3: i) a literature survey of the equivalency among the three measurement methods for RLD that are present of the gtr; ii) the possibility to carry out RLD field test with the adoption of TMH and TML concepts with and without aerodynamic parts. With respect to the first point the chair of Lab-Proc ICE informed that Volkswagen offered to do a comparison of coast down and windtunnel/flatbelt method, Ford offered this with regard to the torque meter method. As for the RLD field tests with TMH and TML, there was no commitment from any of the participants to carry out tests or the provide existing data, so this point has been put on hold until next DTP meeting.

In order to keep the current WLTP roadmap, it was decided to start the preparation of the Confirmation Phase immediately under the responsibility of Ichikawa-san. The objective is to have a workable proposal for Confirmation Phase at GRPE-65.



### 1. Update from the AP Group

A status report was given by Oliver Moersch (doc. WLTP-DTP-11-08). The group considered, that no further validation is necessary for N<sub>2</sub>O measurement and that sufficient validation results for NO/NO<sub>2</sub> are expected from VP2. Additional validation will however be necessary for NH<sub>3</sub>, EtOH and aldehydes. Experts from the AP-group are in close contact to the DC to solve open issues and to give input to the DC in due time.

### 2. Update from the PM/PN Group

A status report was given by Celine Vallade (doc. WLTP-DTP-11-09). She reported that the group focuses on open issues that can be solved on the basis of VP2 results. She indicated that probably not all open issues – especially regeneration issues – can be solved until the next GRPE due to missing evaluation data. Calibration issues are also postponed to 2013. However the group is confident that all open issues will be solved by the end of WLTP Phase I.

### 3. Update from the LabProICE Group

A report was given by Stephan Redmann (doc. WLTP-DTP-11-06).

All open issues of LabProICE are incorporated in the GTR draft document.

LabProICE presented a list of open issues:

- ☐ Test room and soak area temperature:

As Europe proposes a temperature setpoint of 22°C and India and Japan propose a temperature setpoint of 25°C, there was no common solution. No final agreement could be achieved.

A probable compromise approach could be found in the combination of setpoint and tolerances. The issue will be discussed once again at the next DTP web conference.

A decision on the temperature setpoint is necessary to start the confirmation phase. DTP invites all concerned parties to seek a compromise solution.

- ☐ Payload Factor

As the EU keeps to the former LabProICE proposal (+15% for M<sub>1</sub> and +35% for N<sub>1</sub>, based on statistical data from GB), Japan proposes +15% for M<sub>1</sub> and +17,3% for N<sub>1</sub> based on Japanese and UK statistical data. Japan promised to further explain the their data in order to better understand the differences between the European and Japanese data.

G. D'Urbano promised to seek further national data.

It was reported that the average maximum payload for M<sub>1</sub> vehicles is approx. 400kg and for N<sub>1</sub> approx. 700kg.

There was a principle agreement on the general concept to use payload factors.

There was also a general agreement on the M<sub>1</sub> load-factor (+15%), but no final agreement on the N<sub>1</sub> factor could be achieved so far.

- ☐ Inclusion of aerodynamic options into the test mass approach from T&E/NL/ICCT:

LabProclCE generally accepted that minor aerodynamic options shall be included into the test mass concept, as long as the influence of the aerodynamic options in determining the test mass is acceptable low.

DTP discussed that the CO<sub>2</sub> effect of all aerodynamic options is expected to be approx. 5g CO<sub>2</sub>/km.

As a possible alternative, the EU-COM proposed to determine the CO<sub>2</sub> effect of a specific vehicle by interpolating between the maximum and the minimum air drag coefficient (f<sub>2L</sub> and f<sub>2H</sub>).

The DTP group asked LabProclCE to prepare a decision taking into account simulation data which will be provided by General Motors and measurement data, if available. EU-COM is asked to formulate its proposal of interpolating the air drag effect and present this to LabProclCE.

☐ Tyre Selection Criteria

At DTP 10, it was in principle agreed to choose the tyre from the worst rolling resistance class. A final decision shall however be based on the basis of the ICCT-study (see doc. WLTP-DTP-11-07). This study showed that the tyre effect for different rolling resistance classes is 2-5g CO<sub>2</sub>/km (depending on vehicle weight and rolling resistance class). It further concluded that a rolling resistance classification scheme is helpful to overcome inaccuracies when determining the RR.

DTP decided to accept in principle the LabProclCE-Proposal to choose the tyre from the worst rolling resistance class. LabProc ICE will further consider the additional criteria proposal from EU (see EU-Position document xxx).

☐ Proportional Fan Speed

As ACEA showed, that there is no significant impact between a fan speed of 120 and 132 km/h for the measured vehicle. LabProclCE therefore proposed to allow a speed tolerance of 10 per cent or +-5 km/h.

This proposal was accepted by DTP.

☐ RLD: Table of Running Resistances:

There was no acceptable proposal available at LabProclCE, but PSA will try to define together with JRC and India a commonly acceptable proposal. The issue will be kept on the agenda for LabProclCE.

☐ RLD: tyre condition: proposal from NL:

NL promised to consult tyre-experts. The issue will be kept on the agenda for LabProclCE.

VP2-Evaluation:

Konrad Kolesa presented the work on different VP2 evaluation issues. This evaluation work is mainly based on Lot 1-Database (17 vehicles and 7 labs). Several recommendations for GTR drafting were presented by LabProclCE-Subgroup.

The group acknowledged these recommendations. The following discussion turned around the point whether the tolerances and boundaries should rather reflect the future/best available test equipment or consider the worst case/worst lab equipment. In this context, Klaus Steininger recommended to take into account further progress of laboratory equipment. The design of the new test procedure will lead to an improvement of laboratory equipment.

DTP acknowledges the fact that an improvement of laboratory test equipment might become necessary.

LabProclCE stated that cycle allocation and mode construction will have an impact on measurement equipment, calculations, etc. Therefore DTP strongly recommends coming to a decision on cycle allocation and mode construction.

The group proposed to set up a small task-force with DTP and DHC experts to formulate a mode construction proposal to DHC and DTP. Ichikawa-san will set up this task force.

#### **4. Update from the LabProcEV Group**

Kobayashi-san gave a detailed progress report (see doc. WLTP-DTP-11-10).

Subgroup EV indicated that the results from VP2 will be analysed before the end of this year.

Subgroup ELab is directly in charge of conducting of the VP2-tests.

Many open issues have been solved or discussed, 15 open issues will be discussed in November.

A crucial point is the definition of a globally harmonised utility factor (UF) for PHEVs. US and Japan already apply a national UF. The EV group strongly asks for data especially from Europe and India to try to determine a uniform UF.

#### **5. Update from the Drafting Coordinator**

Serge Dubuc gave an overview about the status of drafting work (see doc. WLTP-DTP-11-11).

The aim is to have a readable and complete version of the draft GTR text by the end of this year.

The group welcomed this huge amount of work and the progress made by the DC.

The DC coordinator asks for further feedback to the open issues.

#### **6. Next meetings**

A DTP audio/web conference will be held the 14<sup>th</sup> of December, 8h30 – 11h00 a.m (CET). The DTP subgroups and the VP2 Chair are asked to give an interim report. Furthermore, VTF will present a draft proposal on how to organize the confirmation phase together with participating laboratories and subgroups.

A DTP audio/web conference will be held the 8<sup>th</sup> of January, 8h30 – 11h00 a.m. (CET) The DTP subgroups and the VP2 Chair are asked to give a draft final report in the view of the upcoming GRPE-session.

DTP 12 will be held the 16<sup>th</sup> of January from 9 a.m. until 5 p.m. prior to next GRPE in January, 2013, Palais des Nations, Geneva, Switzerland.

All subgroup reports will be posted on the CIRCA and UN-ECE website:

<http://circa.europa.eu/Members/irc/enterprise/wltp-dtp/library?l=/&vm=detailed&sb=Title>

[http://www.unece.org/trans/main/wp29/wp29wgs/wp29grpe/wltp\\_dtp10.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29grpe/wltp_dtp10.html)

For the wrap-up:

27.09.2012; GD,JS

DRAFT

**To:** DavidA Wright/AA/USEPA/US@EPA[]  
**Cc:** Vincent Mazaitis/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 9/28/2012 4:59:50 PM  
**Subject:** RE: VW Group - Friday Beetle Test Visit  
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<mailto:Wright.DavidA@epamail.epa.gov>  
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[image001.gif](#)

Hello David,

Just a follow up to my voice message - we heard already (from Vince) that full results will not be available for the Beetle TDI test until early next week due to extra measurement time for particulates.

However, if it is possible to obtain any form of early report for partial results such as emissions outcome relative to the standards, or fuel economy values, it would be greatly appreciated.

Regards,

Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, September 27, 2012 2:07 PM  
To: Giles, Michael (EEO)  
Cc: Schlueter, Hannah (EASZ/1); Jim Snyder; Peter, Juergen (EASZ/1)  
Subject: Re: VW Group - Friday Beetle Test Visit

Yes I will be in the office tomorrow morning at 7 am. If you cannot reach me when you arrive, you can also ask to see David VanAmburg. Let me know if you have any other questions.

Regards,

David A. Wright  
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Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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Cc: "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>, "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, Jim Snyder/AA/USEPA/US@EPA  
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Cc: Jim Snyder; William Ott; Chris Nevers  
Subject: RE: Request for US06 Drive Trace

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"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

**To:** DavidA Wright/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 9/28/2012 5:29:01 PM  
**Subject:** RE: VW Group - Friday Beetle Test Visit  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[juergen.peter@volkswagen.de](mailto:juergen.peter@volkswagen.de)  
[hannah.schlueter@volkswagen.de](mailto:hannah.schlueter@volkswagen.de)  
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<mailto:Wright.DavidA@epamail.epa.gov>  
[image001.gif](#)

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Subject: RE: VW Group - Friday Beetle Test Visit

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Regards,

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[image001.gif](#)

Hello David,

Just a quick note to reiterate our wish to review results for the Beetle as soon as possible. The results must go back to Germany (+6 hours), hence our eagerness to see data.

Also, Juergen mentioned to me this morning that he was tentatively planning to a quick visit there around noon if you are available. Please keep us posted on status.

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**Sent:** Mon 10/1/2012 8:48:04 PM  
**Subject:** NVFEL PDF Report Request for Beetle  
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[michael.giles@vw.com](mailto:michael.giles@vw.com)  
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[image001.gif](#)

Hello David,

We now have VERIFY results for the Beetle. However, it would be very helpful if you could also send us a PDF version of the NVFEL reports, especially for the FTP test which contains bag by bag data for all components.

The test numbers are DVWX91001537 and DVWX91001538.

Thank you for your help,

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Hi Mike,

We do not release preliminary data, once we have an official result we make sure are informed and able to review the complete results with your staff in Germany. I have a full schedule this afternoon and will be unable to meet with Juergen.

Regards,

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Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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Date: 10/01/2012 08:17 AM  
Subject: VW Group

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Sent: Friday, September 28, 2012 1:27 PM  
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Subject: RE: VW Group - Friday Beetle Test Visit

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The laboratory performs a review of the test and all preconditioning activities to ensure the test is valid before providing certification with any results. We will forward VW copies of the results, as soon as we receive a copy the results, or, are informed that a preliminary summary is available.

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Cc: Schlueter, Hannah (EASZ/1); Jim Snyder; Peter, Juergen (EASZ/1)  
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To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace

Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
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2565 Plymouth Road  
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\*\*\*\*\* [attachment

"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Mon 10/1/2012 9:35:23 PM  
**Subject:** Re: NVFEL PDF Report Request for Beetle  
[2012\\_0240\\_003.pdf](#)  
[2012\\_0240\\_004.pdf](#)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
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[juergen.peter@volkswagen.de](mailto:juergen.peter@volkswagen.de)  
[hannah.schlueter@volkswagen.de](mailto:hannah.schlueter@volkswagen.de)  
<mailto:Wright.DavidA@epamail.epa.gov>  
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(embedded image)  
(embedded image)  
(embedded image)  
(embedded image)  
(embedded image)

The attached files are copies of the FTP (2012\_0240\_004.pdf) and the HWFE (2012\_0240\_003.pdf).

Regards,

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"Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>  
Date: 10/01/2012 04:48 PM  
Subject: NVFEL PDF Report Request for Beetle

Hello David,

We now have VERIFY results for the Beetle. However, it would be very helpful if you could also send us a PDF version of the NVFEL reports, especially for the FTP test which contains bag by bag data for all components.

The test numbers are DVWX91001537 and DVWX91001538.

Thank you for your help,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Monday, October 01, 2012 8:38 AM  
To: Giles, Michael (EEO)  
Cc: Vincent Mazaitis  
Subject: Re: VW Group

Hi Mike,

We do not release preliminary data, once we have an official result we make sure are informed and able to review the complete results with your staff in Germany. I have a full schedule this afternoon and will be unable to meet with Juergen.

Regards,

David A. Wright  
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Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,


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cert

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0240-003		Vehicle ID: VW324 10220/13					
	Test Date: 9/28/2012		MFR Name: VOLKSWAGEN				
	Key Start: 09:59:06		MFR Codes: 590 VWX				
	Fuel Container ID: F00022		Config #: 00				
	Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur		Transmission: AUTO				
	Test Procedure: 03 HWFET (hwfetprep_hwfet)		Shift Schedule: A09980011				
	Calculation Method: Diesel		Beginning Odometer: 003994.0 MI				
Pretest Remarks:		Drive Schedule: hwfet_hwfet					
<hr/>							
<b>Bag Data</b>							
	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
<b>Phase 1</b>	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	9.488 / 9.604	4.666	0.448	0.950	8.021		
Ambient	3.104	0.215	0.025	0.046	2.147		
Net Concentration	6.605 / 6.721	4.467	0.425	0.908	6.027	0.170	
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks: <u>This test has particulate results.</u>							
<hr/>							
<b>Results</b>							
	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	- / 0.046	0.062	0.009	196.9	0.048	0.001	51.889
(NMOG=NMHC)							
<hr/>							
<b>Fuel Economy</b>							
	<u>Diesel MPG</u>	<u>Coastdown secs:</u>		17.51	<u>Dyno Settings</u>		Dyno #: D329 - FWD
Phase 1	51.60			17.43			Inertia: 3625
				17.31			EPA Set Co A: 8.93
							EPA Set Co B: 0.1494
							EPA Set Co C: 0.02109
				17.41			Emiss-Bench: Mexa 7200dle
<hr/>							

v120518 - d329 EPAVDAEm120928093540
Page 1 of 2
Print Time 01-Oct-2012 14:40

# NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0240-003

Vehicle ID: VW324 10220/13

## Results



	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	
Phase 1	- / 0.470	0.631	0.089	2016.1	0.488	0.012	1.087

## Test Conditions

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	29.23			
Avg Cell Temp (degF)	72.25			
Dew Point (degF)	48.41			
Specific Humidity (grains/lbm)	51.63			
NOx Corr Factor	0.9010			
CO2 Dilution Factor	14.078			
CFV Vmix (scf @68F)	4249.39			
Total Vmix (scf@68F)	4285.26			
CVS Flow Rate Avg (scfm)	333.24			

Fan Placement: One Fan - Up - Front

Phase Time (secs) 765.10

Distance (miles) 10.237

Bag Analysis Time (secs)

## MFR Test Results

for Procedure 3 HWFE

<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>
1E+07	0.0428	0.01	0.002	196	0	0


<u>Odometer</u>	<u>MPG</u>	<u>PM</u>
3750 M	51.9	0.001

MPG is 0.57 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21

Fuel: 19 Cert Diesel 7-15 ppm Sulfur

NVFEL Laboratory Test Data						PARTICULATE		
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
Test Information				Vehicle ID: VW324 10220/13				
	Test Date: 9/28/2012			MFR Name: VOLKSWAGEN				
	Key Start: 09:59:06			MFR Codes: 590 VWX				
	Fuel Container ID: F00022			Config #: 00				
	Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur			Transmission: AUTO				
	Test Procedure: 03 HWFET (hwfetprep_hwfet)			Shift Schedule: A09980011				
	Calculation Method: Diesel			Beginning Odometer: 003994.0 MI				
Pretest Remarks:				Drive Schedule: hwfet_hwfet				
All filter weights are corrected for buoyancy.								
Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / mi	Filter comment
<b>Phase 1</b>								
	B	445186	146.3467	146.3624	0.01570	3.752	0.367	
	C	445187	146.1236	146.1505	0.02691	6.428	0.628	
Remarks:					Exclude A			
<b>Phase 2</b>								
Remarks:								
<b>Phase 3</b>								
Remarks:								
<b>Phase 4</b>								
Remarks:					This test has particulate results.			
Average Results					Net Wt mg	Total Mass mg	Total Mass mg / mi	
Phase 1					0.02131	5.090	0.497	
All filter weights are corrected for buoyancy.								
Reference Filter Stability Check				Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Stability Check	Dyno #: D329 - FWD
2% of Avg Net or 0.01 mg		No.					PASS/FAIL	Inertia: 3625
0.01		1	144.67750	144.67818	0.00068		PASS	EPA Set Co A: 8.93
		2	143.30737	143.30775	0.00039		PASS	EPA Set Co B: 0.1494
								EPA Set Co C: 0.02109
Emissions Bench Mexa 7200dle								
v120518 - d329 EPAVDAEm120928093540				Page 1 of 2		Print Time 01-Oct-2012 14:40		


**NVFEL Laboratory Test Data****PARTICULATE****Final Laboratory Test Results- Refer to VERIFY Reports for Official Data**

Test Number: 2012-0240-003


Vehicle ID: VW324 10220/13


<u>WEIGHING CHAMBER</u>		<u>Buoyancy</u>	<u>Operator</u>	<u>Chamber Temp</u>	<u>Dew Point</u>	<u>Barometer</u>	<u>Last Change in Status</u>
	<u>Timestamp</u>	<u>Factor</u>	<u>(id)</u>	<u>(°F)</u>	<u>(°F)</u>	<u>("Hg)</u>	<u>Status @ timestamp</u>
<b>Pre-test</b>	9/27/12 10:20	1.0011189	022298	72.9	49.5	29.28	NORM @ 09/27/12 00:11:40
<b>Post-test</b>	9/28/12 14:11	1.0011174	022298	71.8	49.3	29.18	NORM @ 09/27/12 21:49:31

<b>Test Conditions</b>	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 4</b>
Barometer (inHg)	29.23			
Avg Cell Temp (degF)	72.25			
Dew Point (degF)	48.41			
Specific Humidity (grains/lbm)	51.63			
NOx Corr Factor	0.9010			
Dilution Factor	14.08			
CFV Vmix (scf @68F)	4249.39			
Sample Volume A (scf @68F)				
Sample Volume B (scf @68F)	17.929			
Sample Volume C (scf @68F)	17.941			
Sample Volume D (scf @68F)				
Sample Volume Average (scf @68F)	11.957			
Total Vmix (scf @68F)	4285.26			
Phase Time (sec)	765.10			
Distance (miles)	10.237			
PSU Probe A (degC)				
PSU Probe B (degC)				
PSU Probe C (degC)				
PSU Dil Air A (degC)	43.9			
PSU Dil Air B (degC)	40.6			
PSU Dil Air C (degC)	38.5			
PSU Filter A (degC)	48.2			
PSU Filter B (degC)	45.7			
PSU Filter C (degC)	49.3			
PSU Dil Flow A (lpm)	0.0			
PSU Dil Flow B (lpm)	15.0			
PSU Dil Flow C (lpm)	14.8			
PSU A Proportionality				
PSU B Proportionality				
PSU C Proportionality				

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0240-004		Vehicle ID: VW324 10220/13					
	Test Date: 9/28/2012		MFR Name: VOLKSWAGEN				
	Key Start / Hot Soak: 08:28:53 / 09:44		MFR Codes: 590 VWX				
	Fuel Container ID: F00022		Config #: 00				
	Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur		Transmission: AUTO				
	Test Procedure: 2		Shift Schedule: A09980005				
	Calculation Method: Diesel		Beginning Odometer: 003983.0 MI				
Pretest Remarks:		Drive Schedule: ftp3bag					
		Soak Period: 22.1 hours					
<b>Bag Data</b>							
	THC / IntTHC	CO	NOx	CO2	CH4	NonMeth HC	
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
<b>Phase 1</b>							
Sample	28.329 / 28.952	35.639	13.351	0.820	18.685		
Ambient	2.484	0.854	0.104	0.050	2.408		
Net Concentration	25.997 / 26.620	34.838	13.253	0.773	16.425	8.766	
Remarks:							
<b>Phase 2</b>							
Sample	6.237 / 6.275	0.584	1.111	0.470	5.706		
Ambient	2.507	0.339	0.080	0.050	2.443		
Net Concentration	3.817 / 3.855	0.257	1.034	0.422	3.349	0.215	
Remarks:							
<b>Phase 3</b>							
Sample	6.640 / 6.769	0.644	0.239	0.649	6.123		
Ambient	2.490	0.294	0.067	0.049	2.430		
Net Concentration	4.270 / 4.400	0.365	0.174	0.603	3.812	0.257	
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks: This test has particulate results.							
<b>Results</b>							
	THC / IntTHC	CO	NOx	CO2	CH4	NMHC / NMOG	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	- / 0.348	0.919	0.530	320.2	0.248	0.114	31.702
Phase 2	- / 0.080	0.011	0.066	278.4	0.081	0.004	36.712
Phase 3	- / 0.057	0.010	0.007	248.3	0.057	0.003	41.178
Weighted	0.12933	0.19883	0.14598	278.819	0.10891	0.02699	
(NMOG=NMHC)							
<b>Fuel Economy</b>							
	Diesel MPG	Dyno Settings					Dyno #: D329 - FWD
Phase 1	31.53						Inertia: 3625
Phase 2	36.51						EPA Set Co A: 8.93
Phase 3	40.95						EPA Set Co B: 0.1494
							EPA Set Co C: 0.02109
Weighted	36.38						Emiss-Bench: Mexa 7200dle
v120518 - d329 EPAVDAEm120928080610							Page 1 of 5
							Print Time 01-Oct-2012 14:41



NVFEL Laboratory Test Data							CVS	
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
Test Number: 2012-0240-004				Vehicle ID: VW324 10220/13				
	<b>Results</b>	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>
		(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	1.087
	Phase 1	- / 1.247	3.294	1.901	1148.1	0.890	0.410	
	Phase 2	- / 0.308	0.042	0.253	1070.5	0.310	0.017	
	Phase 3	- / 0.205	0.034	0.025	890.4	0.205	0.012	
<b>Test Conditions</b>								
		<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>			
	Barometer (inHg)	29.22	29.22	29.22				
	Avg Cell Temp (degF)	72.40	72.35	72.48				
	Dew Point (degF)	51.08	51.21	51.46				
	Specific Humidity (grains/lbm)	57.12	57.39	57.93				
	NOx Corr Factor	0.9225	0.9236	0.9257				
	CO2 Dilution Factor	16.222	28.461	20.609				
	CFV Vmix (scf @68F)	2853.41	4871.63	2836.17				
	Total Vmix (scf@68F)	2867.56	4895.11	2849.92				
	CVS Flow Rate Avg (scfm)	336.62	335.63	335.77				
	Fan Placement: One Fan - Up - Front							
	Phase Time (secs)	508.60	870.90	506.80				
	Distance (miles)	3.586	3.844	3.586				
	Bag Analysis Time (secs)	1004.5	248.6	135.8				
<b>MFR Test Results</b> for Procedure 2 CVS 75 and later (w/o can. load)								
	<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>	
	1E+07	0.0983	0.17	0.018	283	0	0.0038	
	<u>Odometer</u>	<u>MPG</u>	<u>PM</u>					
	3739 M	35.9	0.001					
	MPG is -1.31 % lower than EPA MPG			MFR Lab: Volkswagen AG, Dept EASZ/1				
				Dyno: 21				
				Fuel: 19 Cert Diesel 7-15 ppm Sulfur				
<div style="display: flex; justify-content: space-between; font-size: small;"> <span>v120518 - d329 EPAVDAEm120928080610</span> <span>Page 2 of 5</span> <span>Print Time 01-Oct-2012 14:41</span> </div>								

NVFEL Laboratory Test Data						PARTICULATE		
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
		Test Number: 2012-0240-004				Vehicle ID: VW324 10220/13		
		Test Date: 9/28/2012				MFR Name: VOLKSWAGEN		
		Key Start: 08:28:53 / 09:44				MFR Codes: 590 VWX		
		Fuel Container ID: F00022				Config #: 00		
		Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur				Transmission: AUTO		
Test Procedure: 2				Shift Schedule: A09980005				
Calculation Method: Diesel				Beginning Odometer: 003983.0 MI				
Pretest Remarks:				Drive Schedule: ftp3bag				
				Soak Period: 22.1 hours				
All filter weights are corrected for buoyancy.								
Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / mi	Filter comment
<b>Phase 1</b>								
	B	445180	146.3468	146.3592	0.01245	3.978	1.109	
	C	445183	145.2528	145.2600	0.00715	2.290	0.639	
Remarks:						Exclude A		
<b>Phase 2</b>								
	B	445181	144.9195	144.9251	0.00564	1.803	0.469	
	C	445184	143.5234	143.5348	0.01135	3.643	0.948	
Remarks:						Exclude A		
<b>Phase 3</b>								
	B	445182	141.4078	141.4182	0.01034	3.296	0.919	
	C	445185	144.3881	144.3946	0.00654	2.099	0.585	
Remarks:						Exclude A		
<b>Phase 4</b>								
Remarks: <u>This test has particulate results.</u>								
<b>Average Results</b>					Net Wt mg	Total Mass mg	Total Mass mg / mi	
Phase 1					0.00980	3.134	0.874	
Phase 2					0.00850	2.723	0.708	
Phase 3					0.00844	2.698	0.752	
All filter weights are corrected for buoyancy.								
Weighted All Filters:							0.75475	
<b>Reference Filter Stability Check</b>				Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Stability Check	Dyno #: D329 - FWD
2% of Avg Net or 0.01 mg		No.					PASS/FAIL	Inertia: 3625
0.01		1	144.67750	144.67884	0.00134		PASS	EPA Set Co A: 8.93
		2	143.30737	143.30760	0.00024		PASS	EPA Set Co B: 0.1494
								EPA Set Co C: 0.02109
Emissions Bench Mexa 7200dle								
v120518 - d329 EPAVDAEm120928080610				Page 3 of 5		Print Time 01-Oct-2012 14:41		

**NVFEL Laboratory Test Data****PARTICULATE****Final Laboratory Test Results- Refer to VERIFY Reports for Official Data**

Test Number: 2012-0240-004

Vehicle ID: VW324 10220/13

<u>WEIGHING CHAMBER</u>		<u>Buoyancy</u>	<u>Operator</u>	<u>Chamber Temp</u>	<u>Dew Point</u>	<u>Barometer</u>	<u>Last Change in Status</u>
	Timestamp	Factor	(id)	(°F)	(°F)	("Hg)	Status @ timestamp
<b>Pre-test</b>	9/27/12 10:20	1.0011189	022298	72.9	49.5	29.28	NORM @ 09/27/12 00:11:40
<b>Post-test</b>	9/28/12 10:18	1.0011205	022298	71.1	49.6	29.22	NORM @ 09/27/12 21:49:31

**Test Conditions**

	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 4</b>
Barometer (inHg)	29.22	29.22	29.22	
Avg Cell Temp (degF)	72.40	72.35	72.48	
Dew Point (degF)	51.08	51.21	51.46	
Specific Humidity (grains/lbm)	57.12	57.39	57.93	
NOx Corr Factor	0.9225	0.9236	0.9257	
Dilution Factor	16.22	28.46	20.61	
CFV Vmix (scf @68F)	2853.41	4871.63	2836.17	
Sample Volume A (scf @68F)	-3.769	-7.093	-4.082	
Sample Volume B (scf @68F)	8.979	15.327	8.942	
Sample Volume C (scf @68F)	8.947	15.249	8.886	
Sample Volume D (scf @68F)				
Sample Volume Average (scf @68F)	4.719	7.828	4.582	
Total Vmix (scf @68F)	2867.56	4895.11	2849.92	
Phase Time (sec)	508.60	870.90	506.80	
Distance (miles)	3.586	3.844	3.586	
PSU Probe A (degC)				
PSU Probe B (degC)				
PSU Probe C (degC)				
PSU Dil Air A (degC)	35.6	34.2	37.8	
PSU Dil Air B (degC)	41.6	41.3	41.9	
PSU Dil Air C (degC)	39.1	38.1	39.5	
PSU Filter A (degC)	48.2	49.8	49.4	
PSU Filter B (degC)	50.9	53.6	49.8	
PSU Filter C (degC)	48.8	51.1	50.8	
PSU Dil Flow A (lpm)	15.0	15.0	15.0	
PSU Dil Flow B (lpm)	15.0	15.0	15.0	
PSU Dil Flow C (lpm)	15.0	15.0	15.1	
PSU A Proportionality				
PSU B Proportionality				
PSU C Proportionality				

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Mon 10/1/2012 9:35:23 PM  
**Subject:** Re: NVFEL PDF Report Request for Beetle  
[2012\\_0240\\_003.pdf](#)  
[2012\\_0240\\_004.pdf](#)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
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[juergen.peter@volkswagen.de](mailto:juergen.peter@volkswagen.de)  
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[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
(embedded image)  
(embedded image)  
(embedded image)  
(embedded image)  
(embedded image)

The attached files are copies of the FTP (2012\_0240\_004.pdf) and the HWFE (2012\_0240\_003.pdf).

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA

Cc: Vincent Mazaitis/AA/USEPA/US@EPA, "Rodgers, William (EEO)" <William.Rodgers@vw.com>, "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>  
Date: 10/01/2012 04:48 PM  
Subject: NVFEL PDF Report Request for Beetle

Hello David,

We now have VERIFY results for the Beetle. However, it would be very helpful if you could also send us a PDF version of the NVFEL reports, especially for the FTP test which contains bag by bag data for all components.

The test numbers are DVWX91001537 and DVWX91001538.

Thank you for your help,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Monday, October 01, 2012 8:38 AM  
To: Giles, Michael (EEO)  
Cc: Vincent Mazaitis  
Subject: Re: VW Group

Hi Mike,

We do not release preliminary data, once we have an official result we make sure are informed and able to review the complete results with your staff in Germany. I have a full schedule this afternoon and will be unable to meet with Juergen.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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"Giles, Michael (EEO)" ---10/01/2012 08:17:15 AM---Hello David, Just a quick note to reiterate our wish to review results for the Beetle as soon as pos

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Vincent Mazaitis/AA/USEPA/US@EPA

Date: 10/01/2012 08:17 AM  
Subject: VW Group

Hello David,

Just a quick note to reiterate our wish to review results for the Beetle as soon as possible. The results must go back to Germany (+6 hours), hence our eagerness to see data.

Also, Juergen mentioned to me this morning that he was tentatively planning to a quick visit there around noon if you are available. Please keep us posted on status.

Thanks,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Friday, September 28, 2012 1:27 PM  
To: Giles, Michael (EEO)  
Cc: Vincent Mazaitis  
Subject: RE: VW Group - Friday Beetle Test Visit  
Mike,

The laboratory performs a review of the test and all preconditioning activities to ensure the test is valid before providing certification with any results. We will forward VW copies of the results, as soon as we receive a copy the results, or, are informed that a preliminary summary is available.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

"Giles, Michael (EEO)" ---09/28/2012 01:00:23 PM---Hello David, Just a follow up to my voice message - we heard already (from Vince) that full results

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 09/28/2012 01:00 PM  
Subject: RE: VW Group - Friday Beetle Test Visit

Hello David,

Just a follow up to my voice message - we heard already (from Vince) that full results will not be available for the Beetle TDI test until early next week due to extra measurement time for particulates.

However, if it is possible to obtain any form of early report for partial results such as emissions outcome relative to the standards, or fuel economy values, it would be greatly appreciated.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, September 27, 2012 2:07 PM  
To: Giles, Michael (EEO)  
Cc: Schlueter, Hannah (EASZ/1); Jim Snyder; Peter, Juergen (EASZ/1)  
Subject: Re: VW Group - Friday Beetle Test Visit  
Yes I will be in the office tomorrow morning at 7 am. If you cannot reach me when you arrive, you can also ask to see David VanAmburg. Let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*  
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\*\*\*\*\*

"Giles, Michael (EEO)" ---09/27/2012 08:54:38 AM---Hello David, I understand you are now our backup for Jim, who will be out beginning Friday.

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>, "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, Jim Snyder/AA/USEPA/US@EPA  
Date: 09/27/2012 08:54 AM  
Subject: VW Group - Friday Beetle Test Visit

Hello David,

I understand you are now our backup for Jim, who will be out beginning Friday.

Our colleagues are planning to be at your lab Friday for the start of testing for the Beetle TDI. Our normal lab visit contact person is Vince Mazaitis. We usually need to be there at 7:00 am to see the tests; are you available at this time in case Vince is still out?

Thanks,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, September 12, 2012 8:34 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder; William Ott; Chris Nevers  
Subject: RE: Request for US06 Drive Trace  
Mike,

Thank you for your response. I am wondering, if per our original request, if the factory has any 10 hz data, or if the only data available are 1 hz?

EPA may be requesting additional drive trace data from certification tests in the future and will be requesting the data in the format specified by SAEJ2951. Please do not hesitate to contact me if you require additional information or have further questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*  
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\*\*\*\*\*

"Giles, Michael (EEO)" ---09/05/2012 08:36:55 AM---Hello David, Please find attached the drive trace that the factory provided for this test.

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 09/05/2012 08:36 AM  
Subject: RE: Request for US06 Drive Trace



Hello David,

Please find attached the drive trace that the factory provided for this test.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, August 23, 2012 9:09 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: RE: Request for US06 Drive Trace  
Mike,

Thanks for your reply, I look forward to receiving the data once it has been provided by the factory. Please let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

"Giles, Michael (EEO)" ---08/23/2012 08:05:42 AM---David, I have forwarded your request to our factory and will reply with the information as soon as i

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/23/2012 08:05 AM  
Subject: RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, August 22, 2012 3:54 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace  
Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,


David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\* [attachment  
"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

cert

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0240-003		Vehicle ID: VW324 10220/13					
	Test Date: 9/28/2012		MFR Name: VOLKSWAGEN				
	Key Start: 09:59:06		MFR Codes: 590 VWX				
	Fuel Container ID: F00022		Config #: 00				
	Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur		Transmission: AUTO				
	Test Procedure: 03 HWFET (hwfetprep_hwfet)		Shift Schedule: A09980011				
	Calculation Method: Diesel		Beginning Odometer: 003994.0 MI				
Pretest Remarks:		Drive Schedule: hwfet_hwfet					
<hr/>							
<b>Bag Data</b>							
	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
<b>Phase 1</b>							
Sample	9.488 / 9.604	4.666	0.448	0.950	8.021		
Ambient	3.104	0.215	0.025	0.046	2.147		
Net Concentration	6.605 / 6.721	4.467	0.425	0.908	6.027	0.170	
Remarks:							
<b>Phase 2</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 3</b>							
Sample							
Ambient							
Net Concentration							
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks: <u>This test has particulate results.</u>							
<hr/>							
<b>Results</b>							
	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	- / 0.046	0.062	0.009	196.9	0.048	0.001	51.889
(NMOG=NMHC)							
<hr/>							
<b>Fuel Economy</b>							
	<u>Diesel MPG</u>	<u>Coastdown secs:</u>		17.51	<u>Dyno Settings</u>		Dyno #: D329 - FWD
Phase 1	51.60			17.43			Inertia: 3625
				17.31			EPA Set Co A: 8.93
							EPA Set Co B: 0.1494
							EPA Set Co C: 0.02109
				17.41			Emiss-Bench: Mexa 7200dle
<hr/>							
v120518 - d329 EPAVDAEm120928093540				Page 1 of 2		Print Time 01-Oct-2012 14:40	

# NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2012-0240-003

Vehicle ID: VW324 10220/13

## Results



	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Meth Response</u>
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	
Phase 1	- / 0.470	0.631	0.089	2016.1	0.488	0.012	1.087

## Test Conditions

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	29.23			
Avg Cell Temp (degF)	72.25			
Dew Point (degF)	48.41			
Specific Humidity (grains/lbm)	51.63			
NOx Corr Factor	0.9010			
CO2 Dilution Factor	14.078			
CFV Vmix (scf @68F)	4249.39			
Total Vmix (scf@68F)	4285.26			
CVS Flow Rate Avg (scfm)	333.24			

Fan Placement: One Fan - Up - Front

Phase Time (secs) 765.10

Distance (miles) 10.237

Bag Analysis Time (secs)

## MFR Test Results

for Procedure 3 HWFE

<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>
1E+07	0.0428	0.01	0.002	196	0	0


<u>Odometer</u>	<u>MPG</u>	<u>PM</u>
3750 M	51.9	0.001

MPG is 0.57 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21

Fuel: 19 Cert Diesel 7-15 ppm Sulfur

NVFEL Laboratory Test Data						PARTICULATE		
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
Test Information				Vehicle ID: VW324 10220/13				
	Test Date: 9/28/2012			MFR Name: VOLKSWAGEN				
	Key Start: 09:59:06			MFR Codes: 590 VWX				
	Fuel Container ID: F00022			Config #: 00				
	Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur			Transmission: AUTO				
	Test Procedure: 03 HWFET (hwfetprep_hwfet)			Shift Schedule: A09980011				
	Calculation Method: Diesel			Beginning Odometer: 003994.0 MI				
Pretest Remarks:				Drive Schedule: hwfet_hwfet				
All filter weights are corrected for buoyancy.								
Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / mi	Filter comment
<b>Phase 1</b>								
	B	445186	146.3467	146.3624	0.01570	3.752	0.367	
	C	445187	146.1236	146.1505	0.02691	6.428	0.628	
Remarks:					Exclude A			
<b>Phase 2</b>								
Remarks:								
<b>Phase 3</b>								
Remarks:								
<b>Phase 4</b>								
Remarks: This test has particulate results.								
Average Results					Net Wt mg	Total Mass mg	Total Mass mg / mi	
Phase 1					0.02131	5.090	0.497	
All filter weights are corrected for buoyancy.								
Reference Filter Stability Check				Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Stability Check	Dyno #: D329 - FWD
2% of Avg Net or 0.01 mg		No.					PASS/FAIL	Inertia: 3625
0.01		1	144.67750	144.67818	0.00068		PASS	EPA Set Co A: 8.93
		2	143.30737	143.30775	0.00039		PASS	EPA Set Co B: 0.1494
								EPA Set Co C: 0.02109
Emissions Bench Mexa 7200dle								
v120518 - d329 EPAVDAEm120928093540				Page 1 of 2		Print Time 01-Oct-2012 14:40		


**NVFEL Laboratory Test Data****PARTICULATE****Final Laboratory Test Results- Refer to VERIFY Reports for Official Data**


Test Number: 2012-0240-003

Vehicle ID: VW324 10220/13


<u>WEIGHING CHAMBER</u>		<u>Buoyancy</u>	<u>Operator</u>	<u>Chamber Temp</u>	<u>Dew Point</u>	<u>Barometer</u>	<u>Last Change in Status</u>
	Timestamp	Factor	(id)	(°F)	(°F)	("Hg)	Status @ timestamp
<b>Pre-test</b>	9/27/12 10:20	1.0011189	022298	72.9	49.5	29.28	NORM @ 09/27/12 00:11:40
<b>Post-test</b>	9/28/12 14:11	1.0011174	022298	71.8	49.3	29.18	NORM @ 09/27/12 21:49:31

<u>Test Conditions</u>	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	29.23			
Avg Cell Temp (degF)	72.25			
Dew Point (degF)	48.41			
Specific Humidity (grains/lbm)	51.63			
NOx Corr Factor	0.9010			
Dilution Factor	14.08			
CFV Vmix (scf @68F)	4249.39			
Sample Volume A (scf @68F)				
Sample Volume B (scf @68F)	17.929			
Sample Volume C (scf @68F)	17.941			
Sample Volume D (scf @68F)				
Sample Volume Average (scf @68F)	11.957			
Total Vmix (scf @68F)	4285.26			
Phase Time (sec)	765.10			
Distance (miles)	10.237			
PSU Probe A (degC)				
PSU Probe B (degC)				
PSU Probe C (degC)				
PSU Dil Air A (degC)	43.9			
PSU Dil Air B (degC)	40.6			
PSU Dil Air C (degC)	38.5			
PSU Filter A (degC)	48.2			
PSU Filter B (degC)	45.7			
PSU Filter C (degC)	49.3			
PSU Dil Flow A (lpm)	0.0			
PSU Dil Flow B (lpm)	15.0			
PSU Dil Flow C (lpm)	14.8			
PSU A Proportionality				
PSU B Proportionality				
PSU C Proportionality				

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2012-0240-004		Vehicle ID: VW324 10220/13					
	Test Date: 9/28/2012		MFR Name: VOLKSWAGEN				
	Key Start / Hot Soak: 08:28:53 / 09:44		MFR Codes: 590 VWX				
	Fuel Container ID: F00022		Config #: 00				
	Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur		Transmission: AUTO				
	Test Procedure: 2		Shift Schedule: A09980005				
	Calculation Method: Diesel		Beginning Odometer: 003983.0 MI				
Pretest Remarks:		Drive Schedule: ftp3bag					
		Soak Period: 22.1 hours					
<b>Bag Data</b>							
	THC / IntTHC	CO	NOx	CO2	CH4	NonMeth HC	
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
<b>Phase 1</b>							
Sample	28.329 / 28.952	35.639	13.351	0.820	18.685		
Ambient	2.484	0.854	0.104	0.050	2.408		
Net Concentration	25.997 / 26.620	34.838	13.253	0.773	16.425	8.766	
Remarks:							
<b>Phase 2</b>							
Sample	6.237 / 6.275	0.584	1.111	0.470	5.706		
Ambient	2.507	0.339	0.080	0.050	2.443		
Net Concentration	3.817 / 3.855	0.257	1.034	0.422	3.349	0.215	
Remarks:							
<b>Phase 3</b>							
Sample	6.640 / 6.769	0.644	0.239	0.649	6.123		
Ambient	2.490	0.294	0.067	0.049	2.430		
Net Concentration	4.270 / 4.400	0.365	0.174	0.603	3.812	0.257	
Remarks:							
<b>Phase 4</b>							
Sample							
Ambient							
Net Concentration							
Remarks: This test has particulate results.							
<b>Results</b>							
	THC / IntTHC	CO	NOx	CO2	CH4	NMHC / NMOG	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	- / 0.348	0.919	0.530	320.2	0.248	0.114	31.702
Phase 2	- / 0.080	0.011	0.066	278.4	0.081	0.004	36.712
Phase 3	- / 0.057	0.010	0.007	248.3	0.057	0.003	41.178
Weighted	0.12933	0.19883	0.14598	278.819	0.10891	0.02699	
(NMOG=NMHC)							
<b>Fuel Economy</b>							
	Diesel MPG	Dyno Settings					
Phase 1	31.53	Dyno #: D329 - FWD					
Phase 2	36.51	Inertia: 3625					
Phase 3	40.95	EPA Set Co A: 8.93					
		EPA Set Co B: 0.1494					
		EPA Set Co C: 0.02109					
Weighted	36.38	Emiss-Bench: Mexa 7200dle					
v120518 - d329 EPAVDAEm120928080610							
Page 1 of 5							
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NVFEL Laboratory Test Data							CVS	
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
Test Number: 2012-0240-004				Vehicle ID: VW324 10220/13				
	<b>Results</b>	<u>THC / IntTHC</u> (grams)	<u>CO</u> (grams)	<u>NOx</u> (grams)	<u>CO2</u> (grams)	<u>CH4</u> (grams)	<u>NMHC</u> (grams)	<u>Meth Response</u>
	Phase 1	- / 1.247	3.294	1.901	1148.1	0.890	0.410	1.087
	Phase 2	- / 0.308	0.042	0.253	1070.5	0.310	0.017	
	Phase 3	- / 0.205	0.034	0.025	890.4	0.205	0.012	
<b>Test Conditions</b>		<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>			
Barometer (inHg)		29.22	29.22	29.22				
Avg Cell Temp (degF)		72.40	72.35	72.48				
Dew Point (degF)		51.08	51.21	51.46				
Specific Humidity (grains/lbm)		57.12	57.39	57.93				
NOx Corr Factor		0.9225	0.9236	0.9257				
CO2 Dilution Factor		16.222	28.461	20.609				
CFV Vmix (scf @68F)		2853.41	4871.63	2836.17				
Total Vmix (scf@68F)		2867.56	4895.11	2849.92				
CVS Flow Rate Avg (scfm)		336.62	335.63	335.77				
Fan Placement: One Fan - Up - Front								
Phase Time (secs)		508.60	870.90	506.80				
Distance (miles)		3.586	3.844	3.586				
Bag Analysis Time (secs)		1004.5	248.6	135.8				
<b>MFR Test Results</b>		for Procedure 2 CVS 75 and later (w/o can. load)						
<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>		
1E+07	0.0983	0.17	0.018	283	0	0.0038		
<u>Odometer</u>	<u>MPG</u>	<u>PM</u>						
3739 M	35.9	0.001						
MPG is -1.31 % lower than EPA MPG								
			MFR Lab: Volkswagen AG, Dept EASZ/1					
			Dyno: 21					
			Fuel: 19 Cert Diesel 7-15 ppm Sulfur					



NVFEL Laboratory Test Data						PARTICULATE		
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
		Test Number: 2012-0240-004 Test Date: 9/28/2012 Key Start: 08:28:53 / 09:44 Fuel Container ID: F00022 Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur Test Procedure: 2 Calculation Method: Diesel Pretest Remarks:				Vehicle ID: VW324 10220/13 MFR Name: VOLKSWAGEN MFR Codes: 590 VWX Config #: 00 Transmission: AUTO Shift Schedule: A09980005 Beginning Odometer: 003983.0 MI Drive Schedule: ftp3bag Soak Period: 22.1 hours		
All filter weights are corrected for buoyancy.								
Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / mi	Filter comment
<b>Phase 1</b>								
	B	445180	146.3468	146.3592	0.01245	3.978	1.109	
	C	445183	145.2528	145.2600	0.00715	2.290	0.639	
	Remarks:					Exclude A		
<b>Phase 2</b>								
	B	445181	144.9195	144.9251	0.00564	1.803	0.469	
	C	445184	143.5234	143.5348	0.01135	3.643	0.948	
	Remarks:					Exclude A		
<b>Phase 3</b>								
	B	445182	141.4078	141.4182	0.01034	3.296	0.919	
	C	445185	144.3881	144.3946	0.00654	2.099	0.585	
	Remarks:					Exclude A		
<b>Phase 4</b>								
	Remarks: <u>This test has particulate results.</u>							
<b>Average Results</b>					Net Wt mg	Total Mass mg	Total Mass mg / mi	
	Phase 1				0.00980	3.134	0.874	
	Phase 2				0.00850	2.723	0.708	
	Phase 3				0.00844	2.698	0.752	
All filter weights are corrected for buoyancy.								
Weighted All Filters:							0.75475	
<b>Reference Filter Stability Check</b>					Net Wt mg	Stability Check PASS/FAIL	Dyno #: D329 - FWD	
2% of Avg Net or 0.01 mg		No.	Tare (Pre Wt)	Gross (Post Wt)	mg	PASS/FAIL	Inertia: 3625	
0.01		1	144.67750	144.67884	0.00134	PASS	EPA Set Co A: 8.93	
		2	143.30737	143.30760	0.00024	PASS	EPA Set Co B: 0.1494	
							EPA Set Co C: 0.02109	
Emissions Bench Mexa 7200dle								
v120518 - d329 EPAVDAEm120928080610				Page 3 of 5		Print Time 01-Oct-2012 14:41		

**NVFEL Laboratory Test Data****PARTICULATE****Final Laboratory Test Results- Refer to VERIFY Reports for Official Data**

Test Number: 2012-0240-004

Vehicle ID: VW324 10220/13

<u>WEIGHING CHAMBER</u>		<u>Buoyancy</u>	<u>Operator</u>	<u>Chamber Temp</u>	<u>Dew Point</u>	<u>Barometer</u>	<u>Last Change in Status</u>
	Timestamp	Factor	(id)	(°F)	(°F)	("Hg)	Status @ timestamp
<b>Pre-test</b>	9/27/12 10:20	1.0011189	022298	72.9	49.5	29.28	NORM @ 09/27/12 00:11:40
<b>Post-test</b>	9/28/12 10:18	1.0011205	022298	71.1	49.6	29.22	NORM @ 09/27/12 21:49:31

**Test Conditions**

	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 4</b>
Barometer (inHg)	29.22	29.22	29.22	
Avg Cell Temp (degF)	72.40	72.35	72.48	
Dew Point (degF)	51.08	51.21	51.46	
Specific Humidity (grains/lbm)	57.12	57.39	57.93	
NOx Corr Factor	0.9225	0.9236	0.9257	
Dilution Factor	16.22	28.46	20.61	
CFV Vmix (scf @68F)	2853.41	4871.63	2836.17	
Sample Volume A (scf @68F)	-3.769	-7.093	-4.082	
Sample Volume B (scf @68F)	8.979	15.327	8.942	
Sample Volume C (scf @68F)	8.947	15.249	8.886	
Sample Volume D (scf @68F)				
Sample Volume Average (scf @68F)	4.719	7.828	4.582	
Total Vmix (scf @68F)	2867.56	4895.11	2849.92	
Phase Time (sec)	508.60	870.90	506.80	
Distance (miles)	3.586	3.844	3.586	
PSU Probe A (degC)				
PSU Probe B (degC)				
PSU Probe C (degC)				
PSU Dil Air A (degC)	35.6	34.2	37.8	
PSU Dil Air B (degC)	41.6	41.3	41.9	
PSU Dil Air C (degC)	39.1	38.1	39.5	
PSU Filter A (degC)	48.2	49.8	49.4	
PSU Filter B (degC)	50.9	53.6	49.8	
PSU Filter C (degC)	48.8	51.1	50.8	
PSU Dil Flow A (lpm)	15.0	15.0	15.0	
PSU Dil Flow B (lpm)	15.0	15.0	15.0	
PSU Dil Flow C (lpm)	15.0	15.0	15.1	
PSU A Proportionality				
PSU B Proportionality				
PSU C Proportionality				

**To:** DavidA Wright/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 10/2/2012 1:00:26 PM  
**Subject:** RE: NVFEL PDF Report Request for Beetle  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[juergen.peter@volkswagen.de](mailto:juergen.peter@volkswagen.de)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[juergen.peter@volkswagen.de](mailto:juergen.peter@volkswagen.de)  
[hannah.schlueter@volkswagen.de](mailto:hannah.schlueter@volkswagen.de)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
<mailto:Wright.DavidA@epamail.epa.gov>  
[image001.gif](#)

Thanks!

From: DavidA Wright [<mailto:Wright.DavidA@epamail.epa.gov>]  
Sent: Monday, October 01, 2012 5:35 PM  
To: Giles, Michael (EEO)  
Cc: Peter, Juergen (EASZ/1); Vincent Mazaitis; Rodgers, William (EEO); Jim Snyder  
Subject: Re: NVFEL PDF Report Request for Beetle

The attached files are copies of the FTP (2012\_0240\_004.pdf) and the HWFE (2012\_0240\_003.pdf).

(See attached file: 2012\_0240\_003.pdf)(See attached file: 2012\_0240\_004.pdf)

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:[wright.davida@epa.gov](mailto:wright.davida@epa.gov)

\*\*\*\*\*

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mail.

\*\*\*\*\*

"Giles, Michael (EEO)" ---10/01/2012 04:48:53 PM---Hello David, We now have VERIFY results for the Beetle. However, it would be very helpful if you c

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Vincent Mazaitis/AA/USEPA/US@EPA, "Rodgers, William (EEO)" <William.Rodgers@vw.com>, "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>  
Date: 10/01/2012 04:48 PM  
Subject: NVFEL PDF Report Request for Beetle

Hello David,

We now have VERIFY results for the Beetle. However, it would be very helpful if you could also send us a PDF version of the NVFEL reports, especially for the FTP test which contains bag by bag data for all components.

The test numbers are DVWX91001537 and DVWX91001538.

Thank you for your help,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Monday, October 01, 2012 8:38 AM  
To: Giles, Michael (EEO)  
Cc: Vincent Mazaitis  
Subject: Re: VW Group

Hi Mike,

We do not release preliminary data, once we have an official result we make sure are informed and able to review the complete results with your staff in Germany. I have a full schedule this afternoon and will be unable to meet with Juergen.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

\*\*\*\*\*

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\*\*\*\*\*

"Giles, Michael (EEO)" ---10/01/2012 08:17:15 AM---Hello David, Just a quick note to reiterate our wish to review results for the Beetle as soon as pos

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 10/01/2012 08:17 AM  
Subject: VW Group

Hello David,

Just a quick note to reiterate our wish to review results for the Beetle as soon as possible. The results must go back to Germany (+6 hours), hence our eagerness to see data.

Also, Juergen mentioned to me this morning that he was tentatively planning to a quick visit there around noon if you are available. Please keep us posted on status.

Thanks,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Friday, September 28, 2012 1:27 PM  
To: Giles, Michael (EEO)  
Cc: Vincent Mazaitis  
Subject: RE: VW Group - Friday Beetle Test Visit

Mike,

The laboratory performs a review of the test and all preconditioning activities to ensure the test is valid before providing certification with any results. We will forward VW copies of the results, as soon as we receive a copy the results, or, are informed that a preliminary summary is available.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

"Giles, Michael (EEO)" ---09/28/2012 01:00:23 PM---Hello David, Just a follow up to my voice message - we heard already (from Vince) that full results

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 09/28/2012 01:00 PM  
Subject: RE: VW Group - Friday Beetle Test Visit

Hello David,

Just a follow up to my voice message - we heard already (from Vince) that full results will not be available for the Beetle TDI test until early next week due to extra measurement time for particulates.

However, if it is possible to obtain any form of early report for partial results such as emissions outcome relative to the standards, or fuel economy values, it would be greatly appreciated.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, September 27, 2012 2:07 PM  
To: Giles, Michael (EEO)  
Cc: Schlueter, Hannah (EASZ/1); Jim Snyder; Peter, Juergen (EASZ/1)  
Subject: Re: VW Group - Friday Beetle Test Visit

Yes I will be in the office tomorrow morning at 7 am. If you cannot reach me when you arrive, you can also ask to see David VanAmburg. Let me know if you have any other questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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attachment. If you have received this e-mail in error, please destroy it and notify the sender by return mail.  
\*\*\*\*\*

"Giles, Michael (EEO)" ---09/27/2012 08:54:38 AM---Hello David, I understand you are now our backup for Jim, who will be out beginning Friday.

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>, "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, Jim Snyder/AA/USEPA/US@EPA  
Date: 09/27/2012 08:54 AM  
Subject: VW Group - Friday Beetle Test Visit

Hello David,

I understand you are now our backup for Jim, who will be out beginning Friday.

Our colleagues are planning to be at your lab Friday for the start of testing for the Beetle TDI. Our normal lab visit contact person is Vince Mazaitis. We usually need to be there at 7:00 am to see the tests; are you available at this time in case Vince is still out?

Thanks,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, September 12, 2012 8:34 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder; William Ott; Chris Nevers  
Subject: RE: Request for US06 Drive Trace

Mike,

Thank you for your response. I am wondering, if per our original request, if the factory has any 10 hz data, or if the only data available are 1 hz?

EPA may be requesting additional drive trace data from certification tests in the future and will be requesting the data in the format specified by SAEJ2951. Please do not hesitate to contact me if you require additional information or have further questions.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road

Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

"Giles, Michael (EEO)" ---09/05/2012 08:36:55 AM---Hello David, Please find attached the drive trace that the factory provided for this test.

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 09/05/2012 08:36 AM  
Subject: RE: Request for US06 Drive Trace

Hello David,

Please find attached the drive trace that the factory provided for this test.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Thursday, August 23, 2012 9:09 AM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: RE: Request for US06 Drive Trace

Mike,

Thanks for your reply, I look forward to receiving the data once it has been provided by the factory. Please let me know if you have any other questions.

Regards,

David A. Wright



U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\*

"Giles, Michael (EEO)" ---08/23/2012 08:05:42 AM---David, I have forwarded your request to our factory and will reply with the information as soon as i

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: Jim Snyder/AA/USEPA/US@EPA  
Date: 08/23/2012 08:05 AM  
Subject: RE: Request for US06 Drive Trace

David,

I have forwarded your request to our factory and will reply with the information as soon as it arrives.

Regards,  
Mike

From: DavidA Wright [mailto:Wright.DavidA@epamail.epa.gov]  
Sent: Wednesday, August 22, 2012 3:54 PM  
To: Giles, Michael (EEO)  
Cc: Jim Snyder  
Subject: Request for US06 Drive Trace

Michael,

EPA is requesting a 10 Hz US06 drive trace file for the following test number:

Mfr. Vehicle ID Test Date Manuf. Test Number  
Audi VW465 790007/09 12/09/11 CADX10019487

EPA is requesting the data be submitted according to the recommended practice SAEJ2951 Drive Quality

Evaluation for Chassis Dynamometer Testing format.

If you have any questions regarding the format or SAEJ2951, please contact me.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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\*\*\*\*\* [attachment

"Copy of US06\_Trace.xlsm" deleted by DavidA Wright/AA/USEPA/US]

**To:** DavidA Wright/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; im Snyder/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; incent Mazaitis/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 10/2/2012 5:10:22 PM  
**Subject:** VW Group - Request for Release of Beetle

Hello David,

This note is in regards to the Beetle TDI vehicle (vehicle ID VW324 10220/13) which recently underwent confirmatory tests (FTP, Hwy) at EPA. We request release of the vehicle for evaluation and possible repair.

Prior to delivery to EPA, and due to a technical error, several gallons of gasoline (not diesel fuel) were added to the fuel tank, and the vehicle was subsequently driven. The mistake was recognized when the vehicle failed to re-start. After this incident, an attempt to correct the issue was made. At the time the vehicle was delivered, there was a brief discussion about this incident with Ben Haynes. To summarize, VW informed Ben of the incident and requested a discussion if there were problems during OBD checks prior to test.

Volkswagen is concerned that this mis-fueling incident may have caused damage to the test vehicle immediately prior to the test which, despite our attempts at recovery, could have negatively impacted the emissions results. We are therefore planning to evaluate the vehicle at our facility. If damage is found, we would like to repair the vehicle to the correct certification condition. Following this outcome, we would request that the vehicle be re-tested once repaired.

Please let us know if you have any concerns about the above steps.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Tue 10/2/2012 5:33:55 PM  
**Subject:** Re: VW Group - Request for Release of Beetle

Hello Mike,

I've released the vehicle as Ben indicated.

I hope it's a minor "fix."

Thanks,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: DavidA Wright/AA/USEPA/US@EPA  
Cc: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>, Jim Snyder/AA/USEPA/US@EPA, "Rodgers, William (EEO)" <William.Rodgers@vw.com>, Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 10/02/2012 01:10 PM  
Subject: VW Group - Request for Release of Beetle

Hello David,

This note is in regards to the Beetle TDI vehicle (vehicle ID VW324 10220/13) which recently underwent confirmatory tests (FTP, Hwy) at EPA. We request release of the vehicle for evaluation and possible repair.

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Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** CN=David A Wright/OU=AA/O=USEPA/C=US  
**Sent:** Tue 10/2/2012 5:42:22 PM  
**Subject:** Re: VW Group - Request for Release of Beetle

I have no concerns with the steps you have described. I look forward to hearing what you learn once you have completed your diagnostics.

Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
Ann Arbor, Michigan 48105  
734 214-4467  
e-mail:wright.davida@epa.gov

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**To:** David A Wright/AA/USEPA/US@EPA  
**Cc:** "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>, Jim Snyder/AA/USEPA/US@EPA, "Rodgers, William (EEO)" <William.Rodgers@vw.com>, Vincent Mazaitis/AA/USEPA/US@EPA  
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Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
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**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=DavidA Wright/OU=AA/O=USEPA/C=US  
**Sent:** Tue 10/2/2012 5:42:22 PM  
**Subject:** Re: VW Group - Request for Release of Beetle

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Regards,

David A. Wright  
U.S. EPA - OTAQ  
Compliance Division, Light-Duty Vehicle Center  
2565 Plymouth Road  
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**To:** DavidA Wright/AA/USEPA/US@EPA  
**Cc:** "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>, Jim Snyder/AA/USEPA/US@EPA, "Rodgers, William (EEO)" <William.Rodgers@vw.com>, Vincent Mazaitis/AA/USEPA/US@EPA  
**Date:** 10/02/2012 01:10 PM  
**Subject:** VW Group - Request for Release of Beetle

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Please let us know if you have any concerns about the above steps.

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 10/4/2012 3:53:59 PM  
**Subject:** re: 2013 FE Guide - Errors in EPA's data base as of Oct 1, 2012 which held up posting on [www.fueleconomy.gov](http://www.fueleconomy.gov)  
[VW Group 2013 FE Guide-all-rel dates-no-sales 10-1-2012.xlsx](#)

Richard,

Attached are the data in Verify as of Oct 1, 2012. Labels with pea green fill in the first few columns were not sent to DOE on Oct 3, 2012 for posting on the web. The next normal posting will be October 15, 2012.

Please make any needed corrections as soon as possible.

Thanks

EPA comr	VERIFY cc	Model Yr (Mfr Name	Division (ICarline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013 Audi	Audi	A3 ADX	59	2.0 4
Diesel;		2013 Audi	Audi	A3 ADX	73	2.0 4
		2013 Audi	Audi	A3 ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro ADX	60	2.0 4
		2013 Audi	Audi	A4 ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro ADX	102	2.0 4
		2013 Audi	Audi	A4 quattro ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet ADX	39	2.0 4
		2013 Audi	Audi	A5 Cabriolet ADX	104	2.0 4
		2013 Audi	Audi	A5 quattro ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro ADX	103	2.0 4
		2013 Audi	Audi	A5 quattro ADX	41	2.0 4
		2013 Audi	Audi	A6 ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro ADX	76	3.0 6
Relabeled. Please include in 2013		2013 Audi	Audi	A8 ADX	128	3.0 6
Relabeled. Please include in 2013		2013 Audi	Audi	A8 ADX	98	4.0 8
Relabeled. Please include in 2013		2013 Audi	Audi	A8L ADX	97	4.0 8
		2013 Audi	Audi	A8L ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro ADX	134	2.0 4
		2013 Audi	Audi	allroad quattro ADX	101	2.0 4
		2013 Audi	Audi	Q5 ADX	91	2.0 4
		2013 Audi	Audi	Q5 ADX	105	2.0 4
Hybrid;		2013 Audi	Audi	Q5 Hybrid ADX	95	2.0 4
		2013 Audi	Audi	Q7 ADX	61	3.0 6
Diesel;		2013 Audi	Audi	Q7 ADX	53	3.0 6
		2013 Audi	Audi	RS5 ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet ADX	52	4.2 8
		2013 Audi	Audi	S4 ADX	42	3.0 6
		2013 Audi	Audi	S4 ADX	45	3.0 6
		2013 Audi	Audi	S5 ADX	43	3.0 6
		2013 Audi	Audi	S5 ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet ADX	44	3.0 6
		2013 Audi	Audi	S6 ADX	48	4.0 8
		2013 Audi	Audi	S7 ADX	47	4.0 8
		2013 Audi	Audi	S8 ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe quattro ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster quattro ADX	67	2.0 4
		2013 Audi	Audi	TTRS Coupe ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental BEX King Spur	110	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX	108	4.0 8
		2013 Bentley	Bentley Motors	Continental BEX	113	6.0 12
Error in coY		2013 Bentley	Bentley Motors	Continental BEX	131	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX C	107	4.0 8
		2013 Bentley	Bentley Motors	Continental BEX C	111	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX C	130	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX Sports Continental	112	6.0 12

	2013 Bentley	Bentley Motors	Bentley BEX	96	6.8	8
	2013 Bugatti	Bugatti	Veyron BGT	88	8.0	16
	2013 Lamborghini	Lamborghini	Aventador Coupe	92	6.5	12
	2013 Lamborghini	Lamborghini	Aventador Roadster	93	6.5	12
	2013 Lamborghini	Lamborghini	Gallardo Coupe	30	5.2	10
	2013 Lamborghini	Lamborghini	Gallardo CNLX	32	5.2	10
	2013 Lamborghini	Lamborghini	Gallardo Spider	31	5.2	10
	2013 Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel;	2013 Volkswagen	Volkswagen	BEETLE VWX	94	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE VWX	19	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	BEETLE VWX	84	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE VWX	89	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE VWX	17	2.5	5
	2013 Volkswagen	Volkswagen	BEETLE VWX	27	2.5	5
	2013 Volkswagen	Volkswagen	BEETLE CONVERTIBLE	20	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	BEETLE CONVERTIBLE	85	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE CONVERTIBLE	90	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE CONVERTIBLE	18	2.5	5
	2013 Volkswagen	Volkswagen	6C VWX	1	2.0	4
	2013 Volkswagen	Volkswagen	6C VWX	4	2.0	4
	2013 Volkswagen	Volkswagen	6C VWX	2	3.6	6
	2013 Volkswagen	Volkswagen	6C 4MOTION VWX	3	3.6	6
	2013 Volkswagen	Volkswagen	6C 4MOTION VWX	21	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	GOLF VWX	72	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	GOLF VWX	81	2.0	4
	2013 Volkswagen	Volkswagen	GOLF VWX	16	2.5	5
	2013 Volkswagen	Volkswagen	GOLF VWX	26	2.5	5
	2013 Volkswagen	Volkswagen	Golf R VWX	57	2.0	4
	2013 Volkswagen	Volkswagen	GTI VWX	22	2.0	4
	2013 Volkswagen	Volkswagen	GTI VWX	23	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	50	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	Jetta VWX	71	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	86	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	87	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	51	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	Jetta VWX	80	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	15	2.5	5
	2013 Volkswagen	Volkswagen	Jetta VWX	25	2.5	5
Hybrid;	2013 Volkswagen	Volkswagen	Jetta Hybrid VWX	100	1.4	4
Diesel;	2013 Volkswagen	Volkswagen	JETTA SPORT WAGEN	74	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	JETTA SPORT WAGEN	79	2.0	4
	2013 Volkswagen	Volkswagen	JETTA SPORT WAGEN	14	2.5	5
	2013 Volkswagen	Volkswagen	JETTA SPORT WAGEN	24	2.5	5
Diesel;	2013 Volkswagen	Volkswagen	Passat VWX	62	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	Passat VWX	64	2.0	4
	2013 Volkswagen	Volkswagen	Passat VWX	83	2.5	5
	2013 Volkswagen	Volkswagen	Passat VWX	82	2.5	5
	2013 Volkswagen	Volkswagen	Passat VWX	63	3.6	6
	2013 Volkswagen	Volkswagen	TIGUAN VWX	68	2.0	4
	2013 Volkswagen	Volkswagen	TIGUAN VWX	56	2.0	4
	2013 Volkswagen	Volkswagen	TIGUAN 4MOTION	55	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	TOUAREG VWX	54	3.0	6
	2013 Volkswagen	Volkswagen	TOUAREG VWX	78	3.6	6
Hybrid;	2013 Volkswagen	Volkswagen	Touareg H VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S6)	21	28	24				26.6	38.2	30.8102
Auto(AM-S6)	30	42	34				39.0935	59.3437	46.1856
Manual(M6)	21	30	24				25.3	40.3	30.3902
Auto(AM-S6)	21	28	24				27.2	37.1	30.9119
Auto(AV-S6)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	24	30	26				30.4	39.9	34.048
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S7)	16	23	18				19.1	30	22.8332
Auto(AM-S7)	16	22	18				19.2	28.9	22.6159
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	26	21				22.1	34.7	26.4165
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Manual(M6)	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	12	21	15				15.4	26.3	19.3741
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	12	20	15				14.4	26.7	18.1658
Auto(S6)	12	19	14				13.9	24.7	17.3049

Auto(S8)	11	18	13	12.9	21.8	15.8033
Auto(AM-S7)	8	15	10	10	17.9	12.4782
Auto(AM-S7)	11	18	13	12.6	25.2	16.2581
Auto(AM-S7)	10	16	12	11.5	21.2	14.4817
Auto(AM-S6)	13	20	16	16.1	25.4	19.276
Manual(M6)	12	20	15	14	24	17.2308
Auto(AM-S6)	13	20	16	16	25.4	19.197
Manual(M6)	12	20	14	13	22.6	16.0722
Auto(AM-S6)	29	39	32	37.3	55.3	43.7011
Auto(AM-S6)	22	30	25	26.5	42.0656	31.7942
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M5)	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S6)	21	29	24	26.8	40.2092	31.532
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S6)	22	31	25	26.977	42.4936	32.2814
Manual(M6)	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S6)	22	30	25	27.5	41.5	32.4219
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Manual(M6)	19	27	22	23.9	37.1	28.456
Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229
Manual(M6)	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M5)	24	34	28	28.8	46.2	34.6771
Manual(M6)	22	33	26	26.5556	44.9945	32.56
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S7)	41	46	43	55.4	65.2	59.419
Auto(AM-S6)	29	39	33	37.6	56.2	44.1798
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	30	40	34	37.9	56.8	44.5744
Manual(M6)	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M5)	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S6)	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Highway	Unrd	Comb	Unr	Guzzler?	Air Aspir	IAir Aspir	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	(e.g. Au
29.8946	41.5209	34.2046			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	(e.g. Au
20.8146	29.9953	24.1394			TC	Turbocharg	Ad		Manual		6
20.891	28.1035	23.6187			TC	Turbochar	Ad	AMS	Automate		6
23.6355	30.6684	26.3554			TC	Turbochar	Ad	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbocharg	Ad		Semi-Automatic		8
20.402	28.949	23.5279			TC	Turbocharg	Ad		Semi-Automatic		8
22.2425	32.0861	25.8049			TC	Turbocharg	Ad		Manual		6
23.6355	30.6684	26.3554			TC	Turbocharg	Ad	SCV	Selectable Continuously Variable		8 (e.g. C
20.3576	29.8271	23.7508			TC	Turbochar	Ad	SA	Semi-Auto		8
20.402	28.949	23.5279			TC	Turbochar	Ad	SA	Semi-Auto		8
20.3576	29.8271	23.7508			TC	Turbochar	Ad	SA	Semi-Auto		8
20.402	28.949	23.5279			TC	Turbocharg	Ad		Semi-Automatic		8
22.2425	32.0861	25.8049			TC	Turbocharg	Ad		Manual		6
24.5044	32.5529	27.5721			TC	Turbocharg	Ad	SCV	Selectable Continuously Variable		8 (e.g. C
20.3576	29.8271	23.7508			TC	Turbocharg	Ad		Semi-Automatic		8
18.3949	27.2332	21.5408			SC	Superchar	Ad	SA	Semi-Auto		8
17.8058	27.5484	21.1758			SC	Supercharg	Ad		Semi-Automatic		8
8(e)(4)(i) reasons. Please revise release date to the effective date when vehicles were relabelled;											8
17.2616	28.4347	20.9695			TC	Turbocharg	Ad		Semi-Automatic		8
8(e)(4)(i) reasons. Please revise release date to the effective date when vehicles were relabelled;											8
16.0273	25.8053	19.3219			TC	Turbocharg	Ad		Semi-Automatic		8
13.1387	20.6025	15.6978	G		NA	Naturally Aspirated			Semi-Automatic		8
19.9584	26.6824	22.5112			TC	Turbocharg	Ad		Semi-Automatic		8
19.9584	26.6824	22.5112			TC	Turbocharg	Ad		Semi-Automatic		8
19.7289	28.2351	22.823			TC	Turbocharg	Ad		Semi-Automatic		8
19.6619	27.5771	22.5781			TC	Turbocharg	Ad		Semi-Automatic		8
24.0075	29.7936	26.3065			TC	Turbocharg	Ad		Semi-Automatic		8
15.522	21.5458	17.7559			SC	Supercharg	Ad		Semi-Automatic		8
18.74	27.62	21.9099			TC	Turbocharg	Ad		Semi-Automatic		8
15.7409	23.3075	18.4339			NA	Naturally Aspirated	AMS		Automated Manual-	Selectable	7(e.g. Au
15.8793	22.1836	18.2078			NA	Naturally Aspirated	AMS		Automated Manual-	Selectable	7(e.g. Au
18.117	27.558	21.419			SC	Supercharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
17.0438	26.023	20.1767			SC	Supercharg	Ad		Manual		6
18.117	27.558	21.419			SC	Supercharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
17.0438	26.023	20.1767			SC	Supercharg	Ad		Manual		6
17.6699	25.953	20.6333			SC	Supercharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
16.761	26.9697	20.2022			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
16.761	26.9697	20.2022			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
15.2801	25.5632	18.6574			TC	Turbocharg	Ad		Semi-Automatic		8
22.407	31.1674	25.6515			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
22.407	31.1674	25.6515			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
17.751	25.2021	20.4751			TC	Turbocharg	Ad		Manual		6
11.2476	18.7327	13.7134	G		TC	Turbocharg	Ad		Semi-Automatic		6
15.0109	24.4645	18.1706			TC	Turbocharg	Ad		Semi-Automatic		8
11.5043	18.877	13.9574	G		TC	Turbocharg	Ad		Semi-Automatic		6
12.4737	21.0866	15.2827	G		TC	Turbochar	Ad	SA	Semi-Auto		8
14.0639	23.9773	17.2766	G		TC	Turbocharg	Ad		Semi-Automatic		8
11.2476	18.7327	13.7134	G		TC	Turbocharg	Ad		Semi-Automatic		6
12.0226	20.0478	14.6643	G		TC	Turbocharg	Ad		Semi-Automatic		8
11.5043	18.877	13.9574	G		TC	Turbocharg	Ad		Semi-Automatic		6



10.5402	17.7129	12.8889 G	TC	Turbocharged	Semi-Automatic	8
8.4232	14.7698	10.4424 G	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
10.6055	18.4729	13.1199 G	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
9.7957	16.2453	11.9264 G	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
13.4655	19.7573	15.718 G	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
12.0883	19.9831	14.7021 G	NA	Naturally Aspirated	Manual	6
13.3954	19.7741	15.6701 G	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
11.5388	19.5451	14.1465 G	NA	Naturally Aspirated	Manual	6
28.6469	38.87	32.4925	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
22.0202	29.5574	24.8746	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
27.8088	40.6616	32.4203	TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517	TC	Turbocharged	Manual	6
22.2864	28.5683	24.7338	NA	Naturally Aspirated	Semi-Automatic	6
21.7201	30.6767	25.0054	NA	Naturally Aspirated	Manual	5
21.1383	28.6751	23.9738	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
27.8088	40.6616	32.4203	TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517	TC	Turbocharged	Manual	6
21.2302	26.9749	23.4804	NA	Naturally Aspirated	Semi-Automatic	6
21.8706	31.0367	25.2227	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
20.8232	31.7255	24.6324	TC	Turbocharged	Manual	6
17.4935	26.5716	20.6716	NA	Naturally Aspirated	Semi-Automatic	6
16.9415	25.219	19.8774	NA	Naturally Aspirated	Semi-Automatic	6
21.7634	30.1121	24.8658	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
29.8946	41.5209	34.2046	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
29.6183	41.8508	34.104	TC	Turbocharged	Manual	6
23.6446	31.0458	26.486	NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594	NA	Naturally Aspirated	Manual	5
19.278	26.8882	22.0917	TC	Turbocharged	Manual	6
24.2237	32.5108	27.3624	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
21.2839	30.8324	24.7304	TC	Turbocharged	Manual	6
23.7854	31.6043	26.7652	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
29.8946	41.5209	34.2046	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
23.1009	29.1554	25.4822	NA	Naturally Aspirated	Semi-Automatic	6
24.3944	33.6309	27.8344	NA	Naturally Aspirated	Manual	5
21.8931	32.6043	25.6912	TC	Turbocharged	Manual	6
29.6183	41.8508	34.104	TC	Turbocharged	Manual	6
23.6446	31.0458	26.486	NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594	NA	Naturally Aspirated	Manual	5
40.7039	45.7221	42.8187	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
28.8556	39.4682	32.8278	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
29.6183	41.8508	34.104	TC	Turbocharged	Manual	6
23.6446	31.0458	26.486	NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594	NA	Naturally Aspirated	Manual	5
30.4633	40.2057	34.1916	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
30.8024	42.6219	35.1943	TC	Turbocharged	Manual	6
22.1078	30.6611	25.2814	NA	Naturally Aspirated	Semi-Automatic	6
21.8993	32.1378	25.5642	NA	Naturally Aspirated	Manual	5
19.7174	27.8048	22.6868	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
20.6233	26.0617	22.7606	TC	Turbocharged	Semi-Automatic	6
18.1488	26.2617	21.0791	TC	Turbocharged	Manual	6
20.402	25.8545	22.5412	TC	Turbocharged	Semi-Automatic	6
19.649	28.9961	22.9829	TC	Turbocharged	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally Aspirated	Semi-Auto	8
19.8843	23.7762	21.4655	SC	Supercharged	Semi-Auto	8

Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Y	omated M	N	Manual with P	paddles) 2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) 2-Wheel D	DAEXV02.00U5N		5	DU	Diesel, ultra low s
N	N	F		2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DADXV02.(	10		GP	Gasoline (F
MT	with padd			les) F 2-Wheel D	DADXV02.(	10		GP	Gasoline (F
Y	N	A		All Wheel I	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXJ02.0FUB	85	406	GP	Gasoline (Premium
N	N	A		All Wheel I	DAEXV02.03UB	10		GP	Gasoline (Premium
MT	with padd			les) F 2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DADXV02.(	10		GP	Gasoline (F
Y	N	A		All Wheel I	DADXJ02.C	85	406	GP	Gasoline (F
Y	N	A		All Wheel I	DADXV02.(	10		GP	Gasoline (F
Y	N	A		All Wheel I	DAEXJ02.0FUB	85	406	GP	Gasoline (Premium
N	N	A		All Wheel I	DAEXV02.03UB	10		GP	Gasoline (Premium
MT	with padd			les) F 2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DADXJ03.C	10		GP	Gasoline (F
Y	N	A		All Wheel I	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DADXJ03.C	10		GP	Gasoline (F
Y	N	A		All Wheel I	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXV06.3UA8	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXJ02.0FUB	85	389	GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXT02.04UB	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXJ02.0FUB	85	447	GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXT02.0HUB	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXT03.0TLF	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXT03.03UG		5	DU	Diesel, ultra low s
Y	omated M	N	Manual with P	paddles) All Wheel I	DAEXV04.23UL	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DAEXV04.23UL	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DAEXJ03.03UF	10		GP	Gasoline (Premium
N	N	A		All Wheel I	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DAEXJ03.03UF	10		GP	Gasoline (Premium
N	N	A		All Wheel I	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DAEXV02.03UA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DAEXV02.03UA	10		GP	Gasoline (Premium
N	N	A		All Wheel I	DAEXV02.53UK	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A		All Wheel I	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A		All Wheel I	IDBEXV06.	85	364	GP	Gasoline (I
Y	N	A		All Wheel I	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	A		All Wheel I	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	A		All Wheel I	DBEXV06.04UC	85	357	GP	Gasoline (Premium
Y	N	A		All Wheel I	DBEXV06.0501	85	333	GP	Gasoline (Premium

Y	N	R	2-Wheel Drive	DDE/R06.84LA	10		GP	Gasoline (Premium
Y	omated Manual with Paddles)	A	All Wheel Drive	DBGTV08.0V16	10		GPR	Gasoline (Premium
Y	omated Manual with Paddles)	A	All Wheel Drive	DNEVXV06.5L83	10		GPR	Gasoline (Premium
Y	omated Manual with Paddles)	A	All Wheel Drive	DNEVXV06.5L83	10		GPR	Gasoline (Premium
Y	omated Manual with Paddles)	A	All Wheel Drive	DNEVXV05.2LR8	10		GP	Gasoline (Premium
N	N	A	All Wheel Drive	IDADXV05.	10		GP	Gasoline (I
Y	omated Manual with Paddles)	A	All Wheel Drive	DNEVXV05.2LR8	10		GP	Gasoline (Premium
N	N	A	All Wheel Drive	IDADXV05.	10		GP	Gasoline (I
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVEVXV03.6U46	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DNEVXV03.6U46	10		GP	Gasoline (Premium
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.03SA	10		GP	Gasoline (Premium
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
N	N	A	All Wheel Drive	DNEVXV02.03UA	10		GP	Gasoline (Premium
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.0U36	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.0U36	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV01.4PHE	10		GP	Gasoline (Premium
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV02.0U4S		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.0U4S		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with Paddles)	A	2-Wheel Drive	DVEVXV03.6U41	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DNEVXJ02.03UA	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	IDADXT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel Drive	IDVWXT03.	10		GP	Gasoline (F
Y	N	A	All Wheel Drive	IDVWXT03.	10		GP	Gasoline (F

Product Name	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MARGeleded Riletempergbleh)	Not exempt		89	20				
MARGeleded Riletempergbleh)	Not exempt		89	20				
MARGeleded Riletempergbleh)	Not exempt		89	20				
MARGeleded Riletempergbleh)	Not exempt				89	20		
MARGeleded Riletempergbleh)	Not exempt				91	12		
MARGeleded Riletempergbleh)	Not exempt				91	12		
MARGeleded Riletempergbleh)	Not exempt				91	12		
MARGeleded Riletempergbleh)	Not exempt				91	12		
MARGeleded Riletempergbleh)	Not exempt		81	10				
MARGeleded Riletempergbleh)	Not exempt		81	10				
MARGeleded Riletempergbleh)	Not exempt		81	10				
MARGeleded Riletempergbleh)	Not exempt		84	12				
MARGeleded Riletempergbleh)	Not exempt		84	12				
MARGeleded Riletempergbleh)	Not exempt		84	12				
MARGeleded Riletempergbleh)	Not exempt				98	16		
MARGeleded Riletempergbleh)	Not exempt				98	16		
MARGeleded Riletempergbleh)	Not exempt				98	16		
MARGeleded Riletempergbleh)	Not exempt						94	25
MARGeleded Riletempergbleh)	Not exempt				100	15		
MARGeleded Riletempergbleh)	Not exempt				100	15		
MARGeleded Riletempergbleh)	Not exempt				107	15		
MARGeleded Riletempergbleh)	Not exempt				107	15		
MARGeleded Riletempergbleh)	Not exempt				107	15		
MARGeleded Riletempergbleh)	Not exempt				90	28		
MARGeleded Riletempergbleh)	Not exempt				90	28		
MARGeleded Riletempergbleh)	Truck							
MARGeleded Riletempergbleh)	Truck							
MARGeleded Riletempergbleh)	Truck							
MARGeleded Riletempergbleh)	Truck							
MARGeleded Riletempergbleh)	Truck							
MARGeleded Riletempergbleh)	Not exempt		84	13				
MARGeleded Riletempergbleh)	Not exempt		81	10				
MARGeleded Riletempergbleh)	Not exempt				90	13		
MARGeleded Riletempergbleh)	Not exempt				90	13		
MARGeleded Riletempergbleh)	Not exempt		84	13				
MARGeleded Riletempergbleh)	Not exempt		84	13				
MARGeleded Riletempergbleh)	Not exempt		81	10				
MARGeleded Riletempergbleh)	Not exempt				98	16		
MARGeleded Riletempergbleh)	Not exempt						94	25
MARGeleded Riletempergbleh)	Not exempt				100	15		
MARGeleded Riletempergbleh)	Not exempt		74	13				
MARGeleded Riletempergbleh)	Not exempt						74	13
MARGeleded Riletempergbleh)	Not exempt		102	13				
MARGeleded Riletempergbleh)	Not exempt		89	11				
MARGeleded Riletempergbleh)	Not exempt		89	11				
MARGeleded Riletempergbleh)	Not exempt		89	11				
MARGeleded Riletempergbleh)	Not exempt		86	7				
MARGeleded Riletempergbleh)	Not exempt		86	7				
MARGeleded Riletempergbleh)	Not exempt		86	7				
MARGeleded Riletempergbleh)	Not exempt		86	7				

MRC	Lead	Release	Not exempt	100	11		
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt	81	7		
MRC	Lead	Release	Not exempt	81	7		
MRC	Lead	Release	Not exempt	81	7		
MRC	Lead	Release	Not exempt	81	7		
MRC	Lead	Release	Not exempt	94	13		
MRC	Lead	Release	Not exempt	94	13		
MRC	Lead	Release	Not exempt	94	13		
MRC	Lead	Release	Not exempt	94	13		
MRC	Lead	Release	Not exempt	77	11		
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	92	33		
MRC	Lead	Release	Not exempt	92	33		
MRC	Lead	Release	Not exempt	92	33		
MRC	Lead	Release	Not exempt	92	33		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				

Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C	
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre	
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values	
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v	
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unroun	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG valuwe and	
2400	2400	corrected unadj unrnd city highway CO2 and then the reounded number is correct	17.8558
2200	2200		
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and	
2400	2400	corrected 14 20 16	17.8558
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and	
2400	2400	corrected unadj unrnd city highway CO2 and then the reounded number is correct	17.8558
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG valuwe and gallons per 100 value...these values were switched	
2600	2600		
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes	
2700	2700	600.314-08(e)(4); the label was recalulated after completion of EPA confirmatory testing and	
2700	2700	S/S set to yes	
2700	2700	the label was recalulated after completion of EPA confirmatory testing and then added new A	
3000	3000	S/S set to yes	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c	
2500	2500	14 18 15	17.1
2500	2500	corrected unadj unrounded highway and conbined values	
2500	2500	14 19 16	17.4
2200	2200		
3150	3150	CO2 corrections, again Aug 14th, Aug 23 CO2 rounding....adjusted whole CO2 from unadjuste	
2600	2600	CO2 corrections, additonal fuel costs in saving field, corrected Aug 14th	
3150	3150	CO2 corrections	
3150	3150	corrected city CO2 value, typo	
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected city unadj unrounded CO2 , Aug 14th	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected unadj and adj CO2 values, Aug 14th	
2850	2850	CO2 corrections	
2850	2850	CO2 corrections	
3000	3000		
2200	2200	CO2 corrections, Aug 14th correction	
2200	2200	CO2 corrections, Aug 14th	
2850	2850		
4050	4050	corrected unadj unrnd combined CO2 value Aug 14th	9.5
3150	3150		
4050	4050	correct adj unrounded 14 and rounded comb CO2 values Aug 14th	10.3
3800	3800	corrected 9 15 11	10.5
3350	3350		
4050	4050	corrected Comb adj unrnd CO2 10	9.5
3800	3800	corrected axle ratio 15 11	10.5
4050	4050	CO2 rounding correction on Aug 23rd	10.3

4400 4400  
 5700 5700 corrected lock out to "yes" and AMS.  
 4400 4400 lock up to YES., CO2 corrections Aug 14, S/S set to yes, CO2 rounding correction Aug 23rd  
 4750 4750 adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes  
 3550 3550 corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th  
 3800 3800 CO2 rounding correction Aug 23rd  
 3550 3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
 4050 4050 CO2 rounding Aug 23rd then again on Aug 27  
 1800 1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
 2300 2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 corrected CO2 values, corrected fuel cost over 5 years  
 2150 2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
 2150 2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
 2400 2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 CO2 corrections, fuel spending corrected to \$400  
 2300 2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
 2300 2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
 2300 2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
 2700 2700 update after Verify release 10  
 2850 2850 UPDATE after Verify release 10  
 2300 2300 CO2 corrections  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 comb correction  
 2600 2600 CO2 corrections, CO2 rounding corrections Aug 20th  
 2100 2100 CO2 corrections  
 2300 2300 early label, update after Verify release 10  
 2100 2100 corrected unadjusted unrounded CO2 highway and combined values and combined adjusted w  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 2150 2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
 1900 1900 FE and GHG ratings corrected to 7  
 2200 2200 CO2 corrections  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1350 1350 GHG rating corrected to 10, recalc with EPA confirmatory tests  
 1750 1750 CO2 corrections; inhouse derived 5-cycle formula corrected Aug 15th  
 1700 1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th, CO2 rounding corrections A  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1700 1700  
 1650 1650  
 2150 2150 CO2 corrections  
 2050 2050 CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
 2500 2500 CO2 correction  
 2500 2500 corrected CO2 values, CO2 rounding corrections Aug 20th, rounding Aug 23rd  
 2700 2700 CO2 corrections, CO2 rounding corrections Aug 20th  
 2500 2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections, CO2 rounding c  
 2500 2500 CO2 corrections  
 3000 3000 CO2 correction Aug 15th, CO2 rounding corrections Aug 20th  
 2700 2700 CO2 corrections

# Highway Fuel Economy Data for Alternative Fuel Highway Fuel Economy Data for Alternative Fuel

O2  
 ction Aug 20th

alue

ded CO2 value again, second time Aug 14th

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)PG	miles per gallon
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gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)MPG	miles per g
---------	---------	---------	---------	--------	-----	---	------------------	-------------

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)PG	miles per gallon
---------	---------	---------	---------	--------	-----	---	-----------------	------------------

then added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to yes

7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to yes

sumption to 6.2 per ASTM rounding procedure

ity and highway CO2 values

25.6	20.1038	13.5432	18.3117	15.3409	253	E	Ethanol (E85)PG	miles per gallon
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27.1	20.7407	13.7947	19.3602	15.8444	314	E	Ethanol (E85)PG	miles per gallon
------	---------	---------	---------	---------	-----	---	-----------------	------------------

d weighted values not CO2 to tenths value that is imputted into Verify.

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)PG	miles per gallon
------	---------	--------	---------	--------	-----	---	-----------------	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)PG	miles per gallon
------	--------	--------	---------	---------	-----	---	-----------------	------------------

20.8	13.5107	8.8115	15.1054	10.8449	262	E	Ethanol (E85)MPG	miles per g
------	---------	--------	---------	---------	-----	---	------------------	-------------

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)PG	miles per gallon
------	---------	--------	---------	--------	-----	---	-----------------	------------------

20.5	13.4531	8.6127	14.7094	10.5874	262	E	Ethanol (E85)PG	miles per gallon
------	---------	--------	---------	---------	-----	---	-----------------	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)PG	miles per gallon
------	--------	--------	---------	---------	-----	---	-----------------	------------------



, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

roup, CO2 rounding Aug 23rd  
nrounded highway and combined CO2 values  
o 29 MPG  
ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

ed MPG value  
nd corresponding 5-cycle values  
cted calculated values

ction Aug 20th  
rrections Aug 20th

hole CO2 value  
ction Aug 20th

rrections Aug 20th

ug 20th

orrections Aug 20th, CO2 rounding Aug 23rd

Relative Fuel	CO2	CO2	CO2	CO2	Fuel2 EPA	Description	Intake Val	Exhaust V	Carline CI	Carline CI
2012 Ann City	CO2	CO2	CO2	CO2	Fuel2 EPA	Description	Intake Val	Exhaust V	Carline CI	Carline CI
						SIDI;	2	27	Small Station Wag	
						SIDI;	2	27	Small Station Wag	
						SIDI;	2	27	Small Station Wag	
						SIDI;	2	27	Small Stati	
						SIDI;	2	24	Compact C	
						SIDI;	2	24	Compact Cars	
2900	439	302	377	2900		SIDI; FFV;	2	24	Compact Cars	
						SIDI;	2	24	Compact Cars	
						SIDI;	2	23	Subcompact Cars	
						SIDI;	2	23	Subcompa	
2900	439	302	377	2900		SIDI; FFV;	2	23	Subcompa	
						SIDI;	2	23	Subcompa	
2900	439	302	377	2900		SIDI; FFV;	2	23	Subcompact Cars	
						SIDI;	2	23	Subcompact Cars	
						SIDI;	2	25	Midsize Cars	
						SIDI;	2	25	Midsize Cars	
						SIDI;	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Cars	
						SIDI; Unde	2	25	Midsize Ca	
						SIDI;	2	25	Midsize Cars	
						SIDI; Under EPA regulations, the manufacturer	2	26	Large Cars	
						SIDI;	2	26	Large Cars	
						SIDI;	2	27	Small Station Wag	
3100	458	338	404	3100		SIDI; FFV;	2	27	Small Station Wag	
						SIDI;	2	231	Small SUV 4WD	
2900	450	320	392	2900		SIDI; FFV;	2	231	Small SUV 4WD	
						SIDI;	2	231	Small SUV 4WD	
						SIDI;	2	233	Standard SUV 4W	
						SIDI;	2	233	Standard SUV 4W	
						SIDI;	2	23	Subcompact Cars	
						SIDI;	2	23	Subcompact Cars	
						SIDI;	2	24	Compact Cars	
						SIDI;	2	24	Compact Cars	
						SIDI;	2	23	Subcompact Cars	
						SIDI;	2	23	Subcompact Cars	
						SIDI;	2	23	Subcompact Cars	
						SIDI;	2	25	Midsize Cars	
						SIDI;	2	25	Midsize Cars	
						SIDI;	2	25	Midsize Cars	
						SIDI;	2	23	Subcompact Cars	
						SIDI;	2	21	Two Seaters	
						SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650		FFV;	2	25	Midsize Cars	
						SIDI;	2	24	Compact Cars	
4650	794	469	648	4650		FFV;	2	24	Compact Cars	
4250	711	410	576	4250		FFV;	2	24	Compact C	
						SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650		FFV;	2	23	Subcompact Cars	
4250	726	421	589	4250		FFV;	2	23	Subcompact Cars	
4650	794	469	648	4650		FFV;	2	23	Subcompact Cars	

	1	15	Midsize Cars
	2	21	Two Seaters
	2	21	Two Seaters
	2	21	Two Seaters
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	1	14	Compact Cars
	1	14	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
SIDI;	2	25	Midsize Cars
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
cars	Derived 5-cycle label	6/22/2012	12265	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12092	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Derived 5-cycle label	8/28/2012	12549	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12093	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Derived 5-cycle label	8/28/2012	12551	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Derived 5-cycle label	8/28/2012	12550	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/21/2012	12228	N	N	
economy label values for 5-cycles were XX MPG city, XX MPG highway, and XX MPG combined; label val						
car	Vehicle Specific 5-cycle	8/15/2012	12227	N	N	
economy label values for 5-cycles were XX MPG city, XX MPG highway, and XX MPG combined; label val						
car	Vehicle Specific 5-cycle	8/15/2012	12226	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
cars	Derived 5-cycle label	4/26/2012	11490	N	N	
cars	Derived 5-cycle label	8/27/2012	12479	N	N	
	Vehicle Specific 5-cycle	7/11/2012	11319	N	N	
	Derived 5-cycle label	9/10/2012	12595	N	N	
	Vehicle Specific 5-cycle	9/28/2012	12158	N	N	
D	Derived 5-cycle label	6/11/2012	12437	N	N	
D	Vehicle Specific 5-cycle	7/16/2012	12105	N	N	
car	Vehicle Specific 5-cycle	8/8/2012	11510	N	N	
car	Vehicle Specific 5-cycle	12/11/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12106	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12108	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12111	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	8/21/2012	12122	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12115	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12113	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12116	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12119	N	N	
car	Vehicle Specific 5-cycle	9/28/2012	12641	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12117	N	N	
car	Vehicle Specific 5-cycle	9/28/2012	12640	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12440	N	N	

car	Vehicle Specific 5-cycle	6/20/2012	12211		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11087		N	N
car	Vehicle Specific 5-cycle	8/17/2012	12441		N	N
car	Vehicle Specific 5-cycle	6/14/2013	12234		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12128		N	N
car	Vehicle Specific 5-cycle	6/20/2012	12442		N	N
car	Vehicle Specific 5-cycle	6/21/2012	12130		N	N
car	Vehicle Specific 5-cycle	6/22/2012	12466		N	N
car	Derived 5-cycle label	7/19/2012	12135		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187		N	N
car	Derived 5-cycle label	6/25/2012	12272		N	N
car	Vehicle Specific 5-cycle	7/12/2012	12271		N	N
car	Vehicle Specific 5-cycle	7/30/2012	12435		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373		N	N
car	Derived 5-cycle label	7/30/2012	10277		N	N
car	Derived 5-cycle label	6/25/2012	12273		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10186		N	N
car	Vehicle Specific 5-cycle	7/25/2012	11044		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10532		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10534		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527		N	N
car	Derived 5-cycle label	6/22/2012	12264		N	N
car	Derived 5-cycle label	6/25/2012	12268		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12277		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11531		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531		N	N
car	Vehicle Specific 5-cycle	6/18/2012	11372		N	N
car	Derived 5-cycle label	6/22/2012	12263		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11532		N	N
car	Derived 5-cycle label	6/25/2012	12267		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535		N	N
car	Derived Vehicle Specific 5-cycle Calculation Approach for city label but Modified 5-cycle Calculation Approach					
car	Derived 5-cycle label	6/25/2012	12151		N	N
car	Derived 5-cycle label	6/25/2012	12266		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11534		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11536		N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163		N	N
car	Vehicle Specific 5-cycle	6/21/2012	11539		N	N
car	Vehicle Specific 5-cycle	6/21/2012	11547		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554		N	N
	Derived 5-cycle label	6/18/2012	12432		N	N
	Vehicle Specific 5-cycle	6/11/2012	12276		N	N
	Derived 5-cycle label	6/11/2012	12431		N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563		N	N
D	Derived 5-cycle label	6/25/2012	12278		N	N
D	Derived 5-cycle label	6/25/2012	11559		N	N

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N	N		Cylinder deactivation Variable / Fueling 3 and 5 closing of intake and exhaust valves
N	N	CHARGE AIR COOLER (AIR / LIQUID) -- SFI/AIR/BT A/2000/4MT/COWT/2100C/S1902R/2115/d	
N	N	Y	ELECTRONICALLY CONTROLLED FUEL SYSTEM ELECTRONIC EXHAUST VALVE
N	N	Y	ELECTRONICALLY CONTROLLED FUEL SYSTEM ELECTRONIC EXHAUST VALVE
N	N	ENGINE CODE CEH (GALLARDO COUPE AND SPIDER)	INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	ENGINE CN	Y INLET ANIN
N	N	ENGINE CODE CEH (GALLARDO COUPE AND SPIDER)	INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	ENGINE CN	Y INLET ANIN
N	N	N	N
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	N
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	N
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	Y CONTINUOUSLY VARIABLE VALVE TIMING
N	N	N	N
N	N	N	N
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	ENGINE CODE CDMA ONLY.	Y CONTINUOUSLY VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y CONTINUOUSLY VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y CONTINUOUSLY VARIABLE VALVE TIMING
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	N
N	N	N	N
N	N	N	N
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	N
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
Nach for Highway label	N	N	MECHANICAL HYDRAULIC VVT SYSTEM INTAKE AND EXHAUST VALVES
N	N	N	N
N	N	N	N
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	SCR Equipped	N N
N	N	SCR Equipped	N N
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	N	Y INLET CONTINUOUSLY VARIABLE / MECHANICAL HYDRAULIC VVT SYSTEM
N	N	N	Y Electronic Control / Hydraulic adjustment
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	Y position of Intake/exhaust camshaft electronically
N	N	N	N
N	N	N	Y INTAKE / EXHAUST VALVE
N	N	V6 CYLINDER	Y MECHANICAL BATTERY(S)

Device Descri	Battery	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit
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These observations are for the purpose of the investigation and are not intended to be used for any other purpose.

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1 Lithium Ion	266	5	37 On-Board
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STMENT

MECHANICAL-HYDRAULIC

These observations are for the purpose of the investigation and are not intended to be used for any other purpose.

MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

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MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC



aust valves on a single camshaft. No change in valve overlaps.

MECHANICAL-HYDRAULIC

CONTROLLED CONTINUOUSLY VVT

CONTROLLED CONTINUOUSLY VVT

MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

HYDRAULIC

HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

y controlled and hydraulically adjusted

y controlled and hydraulically adjusted

HYDRAULIC

HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

HYDRAULIC

HYDRAULIC

IND OUTLET CAMS 1 Lithium Ion 220 5 27 On-Board

HYDRAULIC

HYDRAULIC

HYDRAULIC

HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

controlled and hydraulically adjusted

CONTROLLED ELECTRONICALLY

AMS 1 NiMH 288 6 21.5 On-Board

(2) third gear at this level, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h  
 (2) third gear at this level, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h  
 (2) third gear at this level, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h

Electrical Regen Brake	Both	Y	1AC Induction
------------------------	------	---	---------------

(2) third gear at this level, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h  
 (2) third gear at this level, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h  
 (2) third gear at this level, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h

(2) third gear at this level, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h

(2) third gear at this level, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h

Electrical REGEN BRAKE PEDAL TRIGGERED REGENERATIVE

1Other

Other BRAKE PEDBoth N

1Other

Motor	Ger	Rated Mot	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell V	Off Board	Camless V	Oil Viscosi
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			CRDI	Common Rail	Direct Diesel Injection	N				5W40
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignit	N	N				5W40
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
h			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
		40	GDI	Spark Ignit	N	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			CRDI	Common Rail	Direct Diesel Injection	N				5W30 VW 50700
			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignit	N	N				5W40
			GDI	Spark Ignit	N	N				5W40
			GDI	Spark Ignit	N	N				5W40 VW 50200
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00
			MFI	Multipoint	N	N				5W30 VW
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00

### 3 PHASE PERMANENT MAGNET

MFI	Multipoint/sequential fuel inject	N	0W40 / VW50200
MFI	Multipoint/sequential fuel inject	N	10W60 VW 50101
MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
GDI	Spark Ignit	N	10W60 VW
GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
GDI	Spark Ignit	N	10W60 VW
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignition Direct Injection	N	5W40 / VW50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common F	N	5W30 VW
GDI	Spark Ignit	N	5W40 VW
GDI	Spark Ignit	N	5W40 VW

Stop/Start Stop/Start Trans in FE Trans as I Model Type Charge De Charge De Charge Su Charge Su EPA Calcul

N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6) 3 frt manual
N	No	Auto(AM-S6)	Auto(AM-S6) A3 quattro
N	No	Auto(AV-S6)	Auto(AV-S6)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8) Audi A6 CVT
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi A6 qu
Y	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi Q7
N	No	Auto(S8)	Auto(S8)
N0700	No	Auto(AM-S7)	Auto(AM-S7)
N0700	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
N0700	No	Auto(AM-S7)	Auto(AM-S7)
N0700	No	Auto(AM-S7)	Auto(AM-S7)
N0700	No	Auto(S8)	Auto(S8)
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Manual(M6)	Manual(M6) TRS
N	No	Auto(S6)	Auto(S6)
N0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
N0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)

VW50500	No	Auto(S8) Auto(S8)
N 50500	No	Auto(AM-S7) Auto(AM-S7)
50700	Yes	Auto(AM-S7) Auto(AM-S7)
50700	Yes	Auto(AM-S7) Auto(AM-S7)
N 50500	No	Auto(AM-S6) Auto(AM-S6)
N 50500	No	Manual(M6) Manual(M6) Gallardo C
N 50500	No	Auto(AM-S6) Auto(AM-S6)
N 50500	No	Manual(M6) Manual(M6) Gallardo S
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) C M6
N	No	Auto(S6) Auto(S6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S7) Auto(AM-S7)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Tiguan front
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Touareg H

Product	Model	Year	EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
		30.8		6	6 DAD XV02.03PA	7		
		46.2		9	8 DVW XV02.0U5N	5		
		30.4		6	6 DAD XV02.03PA	7		
		30.9		6	6 DAD XV02.0	5		
		35.2		7	7 DAD XV02.0	5		
		30.8		6	6 DAD XV02.03UB	5		
		30.9		6	6 DAD XJ02.0FUB	5		
		33.2		7	7 DAD XV02.03UB	5		
		35.2		7	7 DAD XV02.03UB	5		
		30.8		6	6 DAD XV02.0	5		
		30.9		6	6 DAD XJ02.0	5		
		30.8		6	6 DAD XV02.0	5		
		30.9		6	6 DAD XJ02.0FUB	5		
		33.2		7	7 DAD XV02.03UB	5		
		36.9		7	7 DAD XV02.03UB	5		
		30.8		6	6 DAD XV02.03UB	5		
		28.1		5	5 DAD XJ03.0	5		
		27.5		5	5 DAD XJ03.03UF	5		
		27.5		5	5 DAD XJ03.0	5		
		27.1		5	5 DAD XV04.03UJ	5		
		27.5		5	5 DAD XJ03.03UF	5		
		24.4		4	4 DAD XV04.03UJ	5		
		19.3		3	3 DVW XV06.3UA8	5		
		29.5		6	6 DAD XV02.03UB	5		
		29.5		6	6 DAD XJ02.0FUB	5		
		28.8		6	6 DAD XT02.04UB	5		
		29.6		6	6 DAD XJ02.0FUB	5		
		34		7	7 DAD XT02.0HUB	5		
		22.9		4	4 DAD XT03.0TLF	5		
		28.1		5	4 DAD XT03.03UG	5		
		23		4	4 DAD XV04.23UL	5		
		22.6		4	4 DAD XV04.23UL	5		
		26.9		5	5 DAD XJ03.03UF	5		
		23.5		5	5 DAD XJ03.03UF	5		
		26.9		5	5 DAD XJ03.03UF	5		
		23.5		5	5 DAD XJ03.03UF	5		
		26.4		5	5 DAD XJ03.03UF	5		
		25.5		5	5 DAD XV04.03UJ	5		
		25.5		5	5 DAD XV04.03UJ	5		
		23.6		4	4 DAD XV04.03UJ	5		
		33.3		7	7 DAD XV02.03UA	5		
		33.3		7	7 DAD XV02.03UA	5		
		25.6		5	5 DAD XV02.53UK	5		
		17.2		2	2 DBEXV06.0501	5		
		23.6		4	4 DAD XV04.03UJ	5		
		17.4		2	2 DBEXV06.0501	5		
		19.4		3	3 DBEXV06.	5		
		21.8		4	4 DAD XV04.03UJ	5		
		17.2		2	2 DBEXV06.0501	5		
		18.2		3	3 DBEXV06.04UC	5		
		17.4		2	2 DBEXV06.0501	5		



15.9		2	2 DBEXV06.84LA	5
12.6		1	1 DBGTV08.0V16	5
16.4		2	2 DNLXV06.5L83	5
14.5		1	1 DNLXV06.5L83	5
19.4		3	3 DAD XV05.2LR8	5
17.4		3	3 DAD XV05.	5
19.3		3	3 DAD XV05.2LR8	5
16.1		2	2 DAD XV05.	5
43.7		8	7 DVWXV02.0U5N	5
31.8		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
31.6		6	6 DVWXV02.5A59	7
31.9		6	6 DVWXV02.5M59	7
31.5		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
30.3		6	6 DVWXV02.5A59	7
32.3		6	6 DVWXV02.03PA	7
31.8		6	6 DVWXV02.03PA	7
25.8		5	5 DVWXV03.6U46	5
24.8		5	5 DVWXV03.6U46	5
32.4		6	6 DVWXV02.03SA	5
46.2		9	8 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
28.5		5	5 DAD XV02.03UA	5
34.8		7	7 DAD XV02.03PA	7
31.2		6	6 DAD XV02.03PA	7
35		7	7 DVWXV02.03PA	7
46.2		9	8 DVWXV02.0U5N	5
32.9		6	6 DVWXV02.0U36	5
34.7		7	7 DVWXV02.0U36	5
32.6		7	7 DVWXV02.03PA	7
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
59.4		10	10 DVWXV01.4PHE	7
44.2		8	7 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
44.6		9	8 DVWXV02.0U4S	5
46.4		9	8 DVWXV02.0U4S	5
31.9		6	6 DVWXV02.5A59	7
31.7		7	7 DVWXV02.5M59	7
28.5		6	6 DVWXV03.6U41	5
29.9		6	6 DVWXJ02.03UA	5
26.4		5	5 DVWXJ02.03UA	5
29.6		6	6 DVWXJ02.03UA	5
23.3		6	5 DADXT03.(	5
25		4	4 DVWXT03.	5
28.2		5	5 DVWXT03.	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DADXV02.03UA 5

DADXV02.03UA 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

Model Year	MSRP	City CO2	Highway CO2	Combined CO2	CO2- Vol	CO2- Vol	CO2- Vol
2017	56,614	400	432	319	381		
2017	3100		340	245	297		
2017		400	442	296	376		
2017		400	442	316	385		
2017	600		373	304	342		
2017		400	437	297	374		
2017		400	435	306	377		
2017	600		397	276	343		
2017	600		373	304	342		
2017		400	437	297	374		
2017		400	435	306	377		
2017		400	437	297	374		
2017		400	435	306	377		
2017	600		397	276	343		
2017	1350		360	272	320		
2017		400	437	297	374		
2017		1400	482	326	412		
2017		1900	498	321	418		
2017		1900	498	321	418		
2017		1900	515	313	424		
2017		1900	498	321	418		
2017		3400	554	345	460		
2017		6150	675	430	565		
2017		900	444	333	394		
2017		900	444	333	394		
2017		900	450	314	389		
2017		900	452	322	393		
2017	600		369	298	337		
2017		4150	573	411	500		
2017		1400	541	369	464		
2017		4150	562	379	480		
2017		4150	558	398	486		
2017		1900	488	321	413		
2017		2650	441	355	402		
2017		1900	488	321	413		
2017		2650	441	355	402		
2017		1900	500	341	429		
2017		2650	530	330	440		
2017		2650	530	330	440		
2017		3400	580	347	475		
2017	600		394	284	345		
2017	600		394	284	345		
2017		2650	499	350	432		
2017		8650	787	474	646		
2017		4150	590	364	488		
2017		8650	768	469	633		
2017		7400	710	421	580		
2017		5150	638	370	517		
2017		8650	787	474	646		
2017		7400	736	443	604		
2017		8650	768	469	633		

	10400	840	501	688
	16900	1050	599	847
	10400	836	481	676
	12150	902	547	742
	6150	657	447	562
	7400	734	511	634
	6150	660	446	564
	8650	768	452	626
2600		354	262	313
100		401	291	351
2600		365	250	313
	400	430	298	371
850		396	310	358
850		408	289	354
	400	421	310	371
2600		365	250	313
	400	430	298	371
100		418	329	378
100		403	283	349
100		425	279	360
	1900	507	334	429
	2650	523	351	446
100		405	257	338
3100		340	245	297
3100		342	243	297
1350		374	286	334
1350		388	271	335
	1400	460	330	401
1100		379	271	331
100		416	287	358
1100		372	280	331
3100		340	245	297
850		381	299	344
2100		361	262	316
600		403	272	344
3100		342	243	297
1350		374	286	334
1350		388	271	335
4850		219	194	208
2850		352	258	310
3100		342	243	297
1350		374	286	334
1350		388	271	335
3100		331	240	290
3350		330	239	289
850		401	289	351
1350		391	275	339
	900	449	319	390
	900	430	341	390
	1900	484	336	417
	900	435	343	394
	900	517	351	442
	3400	520	391	462
	1900	447	372	413

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690	408	563.1	840.4	501	687.7
885	495	709.5	1050.2	598.8	847.1
705	353	546.6	836	481	676.2
771	418	612.2	902	547	742.2
552	349	460.6	657	447	562.5
635	370	515.8	734	511	633.6
556	348	462.4	660	446	563.7
681	391	550.5	768	452	625.8
272	184	232.4	354.3	261.8	312.7
334.3	211.2	278.9	401	290.6	351.3
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
323.7	227.6	280.5	396.3	310.3	357.6
335.2	207.2	277.6	407.6	288.8	354.1
332	220.9	282	421	310	371
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
335.4	235.6	290.5	418.2	329.4	378.2
327.2	207.7	273.4	402.8	282.7	348.8
346.3	202.5	281.6	425.2	279.3	359.5
419	253	344.3	506.7	333.8	428.9
434	265	358	523	351.1	445.6
321	213	272.4	404.7	256.6	338.1
259.8	171.2	219.9	339.8	244.6	297
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
372	240	312.6	459.5	330.5	401.4
295.1	203.2	253.7	379.2	271.3	330.6
340.4	215.5	284.2	415.9	287	357.9
300.9	196.7	254	372	280.4	330.8
259.8	171.2	219.9	339.8	244.6	297
315	214	269.6	381.3	298.8	344.2
307	192	255.2	360.5	262	316.2
333.9	197.2	272.4	403.3	271.8	344.1
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
161	137	150.2	219	193.9	207.7
270	181	230	351.9	257.7	309.5
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
268	179	228	331	240	290
266	162	219.2	330	239	289
328.2	217.8	278.5	400.9	289.4	350.7
339.6	206.8	279.8	391.3	275	339
372	238	311.7	449	319	390.5
339.6	244.4	296.8	429.9	341.3	390
407	248	335.4	484	336	417.4
343.6	246	299.7	434.6	343.5	393.6
422	248	343.7	517	351	442.3
416	281	355.2	520.1	390.6	461.8
354	267	314.8	446.9	371.8	413.1

City	Wounded to come to aid	Distance	Comb Vol Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT
	N	4.2			4.2		
	N	2.9			2.9		
	N	4.2			4.2		
	N	4.2			4.2		
	N	3.8			3.8		
	N	4.2			4.2		
	N	4.2			4.2		
	N	3.8			3.8		
	N	3.8			3.8		
	N	4.2			4.2		
	N	4.2			4.2		
	N	4.2			4.2		
	N	3.8			3.8		
	N	3.6			3.6		
	N	4.2			4.2		
	N	4.5			4.5		
	N	4.8			4.8		
	N	4.8			4.8		
	N	4.8			4.8		
	N	4.8			4.8		
	N	5.3			5.3		
	N	6.2			6.2		
	N	4.3			4.3		
	N	4.3			4.3		
	N	4.3			4.3		
	N	4.3			4.3		
	N	3.8			3.8		
	N	5.6			5.6		
	N	4.5			4.5		
	N	5.6			5.6		
	N	5.6			5.6		
	N	4.8			4.8		
	N	5			5		
	N	4.8			4.8		
	N	5			5		
	N	4.8			4.8		
	N	5			5		
	N	5			5		
	N	5.3			5.3		
	N	3.8			3.8		
	N	3.8			3.8		
	N	5			5		
	N	7.1			7.1		
	N	5.6			5.6		
	N	7.1			7.1		
	N	6.7			6.7		
	N	5.9			5.9		
	N	7.1			7.1		
	N	6.7			6.7		
	N	7.1			7.1		



N	7.7	7.7
N	10	10
N	7.7	7.7
N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.3	2.3
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8





Mr. Richard E Thomas Jr.  
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Mr. Richard 6

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Mr. Richard 3

Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.  
Mr. Richard E Thomas Jr.

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**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Thur 10/4/2012 3:53:59 PM  
**Subject:** re: 2013 FE Guide - Errors in EPA's data base as of Oct 1, 2012 which held up posting on [www.fueleconomy.gov](http://www.fueleconomy.gov)  
[VW\\_Group\\_2013\\_FEGuide-all-rel dates-no-sales 10-1-2012.xlsx](#)

Richard,

Attached are the data in Verify as of Oct 1, 2012. Labels with pea green fill in the first few columns were not sent to DOE on Oct 3, 2012 for posting on the web. The next normal posting will be October 15, 2012.

Please make any needed corrections as soon as possible.

Thanks

EPA comr	VERIFY cc	Model Yr (Mfr Name	Division (ICarline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013 Audi	Audi	A3 ADX	59	2.0 4
Diesel;		2013 Audi	Audi	A3 ADX	73	2.0 4
		2013 Audi	Audi	A3 ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro ADX	60	2.0 4
		2013 Audi	Audi	A4 ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro ADX	102	2.0 4
		2013 Audi	Audi	A4 quattro ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet ADX	39	2.0 4
		2013 Audi	Audi	A5 Cabriolet ADX	104	2.0 4
		2013 Audi	Audi	A5 quattro ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro ADX	103	2.0 4
		2013 Audi	Audi	A5 quattro ADX	41	2.0 4
		2013 Audi	Audi	A6 ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro ADX	76	3.0 6
Relabeled. Please include in 2013		2013 Audi	Audi	A8 ADX	128	3.0 6
Relabeled. Please include in 2013		2013 Audi	Audi	A8 ADX	98	4.0 8
Relabeled. Please include in 2013		2013 Audi	Audi	A8L ADX	97	4.0 8
		2013 Audi	Audi	A8L ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro ADX	134	2.0 4
		2013 Audi	Audi	allroad quattro ADX	101	2.0 4
		2013 Audi	Audi	Q5 ADX	91	2.0 4
		2013 Audi	Audi	Q5 ADX	105	2.0 4
Hybrid;		2013 Audi	Audi	Q5 Hybrid ADX	95	2.0 4
		2013 Audi	Audi	Q7 ADX	61	3.0 6
Diesel;		2013 Audi	Audi	Q7 ADX	53	3.0 6
		2013 Audi	Audi	RS5 ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet ADX	52	4.2 8
		2013 Audi	Audi	S4 ADX	42	3.0 6
		2013 Audi	Audi	S4 ADX	45	3.0 6
		2013 Audi	Audi	S5 ADX	43	3.0 6
		2013 Audi	Audi	S5 ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet ADX	44	3.0 6
		2013 Audi	Audi	S6 ADX	48	4.0 8
		2013 Audi	Audi	S7 ADX	47	4.0 8
		2013 Audi	Audi	S8 ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe quattro ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster quattro ADX	67	2.0 4
		2013 Audi	Audi	TTRS Coupe ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental BEYing Spur	110	6.0 12
		2013 Bentley	Bentley Motors	Continental BEX	108	4.0 8
		2013 Bentley	Bentley Motors	Continental BEX	113	6.0 12
Error in coY		2013 Bentley	Bentley Motors	Continental BEX	131	6.0 12
		2013 Bentley	Bentley Motors	Continental BEXC	107	4.0 8
		2013 Bentley	Bentley Motors	Continental BEXC	111	6.0 12
		2013 Bentley	Bentley Motors	Continental BEXC	130	6.0 12
		2013 Bentley	Bentley Motors	Continental BEXpersports Cont	112	6.0 12

	2013 Bentley	Bentley Motors	Bentley BEX	96	6.8	8
	2013 Bugatti	Bugatti	Veyron BGT	88	8.0	16
	2013 Lamborghini	Lamborghini	Aventador Coupe	92	6.5	12
	2013 Lamborghini	Lamborghini	Aventador Roadster	93	6.5	12
	2013 Lamborghini	Lamborghini	Gallardo Coupe	30	5.2	10
	2013 Lamborghini	Lamborghini	Gallardo CNLX	32	5.2	10
	2013 Lamborghini	Lamborghini	Gallardo Spider	31	5.2	10
	2013 Lamborghini	Lamborghini	Gallardo SNLX	33	5.2	10
Diesel;	2013 Volkswagen	Volkswagen	BEETLE VWX	94	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE VWX	19	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	BEETLE VWX	84	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE VWX	89	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE VWX	17	2.5	5
	2013 Volkswagen	Volkswagen	BEETLE VWX	27	2.5	5
	2013 Volkswagen	Volkswagen	BEETLE CONVERTIBLE	20	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	BEETLE CONVERTIBLE	85	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE CONVERTIBLE	90	2.0	4
	2013 Volkswagen	Volkswagen	BEETLE CONVERTIBLE	18	2.5	5
	2013 Volkswagen	Volkswagen	6C VWX	1	2.0	4
	2013 Volkswagen	Volkswagen	6C VWX	4	2.0	4
	2013 Volkswagen	Volkswagen	6C VWX	2	3.6	6
	2013 Volkswagen	Volkswagen	6C 4MOTION VWX	3	3.6	6
	2013 Volkswagen	Volkswagen	6C 4MOTION VWX	21	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	GOLF VWX	72	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	GOLF VWX	81	2.0	4
	2013 Volkswagen	Volkswagen	GOLF VWX	16	2.5	5
	2013 Volkswagen	Volkswagen	GOLF VWX	26	2.5	5
	2013 Volkswagen	Volkswagen	Golf R VWX	57	2.0	4
	2013 Volkswagen	Volkswagen	GTI VWX	22	2.0	4
	2013 Volkswagen	Volkswagen	GTI VWX	23	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	50	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	Jetta VWX	71	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	86	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	87	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	51	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	Jetta VWX	80	2.0	4
	2013 Volkswagen	Volkswagen	Jetta VWX	15	2.5	5
	2013 Volkswagen	Volkswagen	Jetta VWX	25	2.5	5
Hybrid;	2013 Volkswagen	Volkswagen	Jetta Hybrid VWX	100	1.4	4
Diesel;	2013 Volkswagen	Volkswagen	JETTA SPORT WAGEN	74	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	JETTA SPORT WAGEN	79	2.0	4
	2013 Volkswagen	Volkswagen	JETTA SPORT WAGEN	14	2.5	5
	2013 Volkswagen	Volkswagen	JETTA SPORT WAGEN	24	2.5	5
Diesel;	2013 Volkswagen	Volkswagen	Passat VWX	62	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	Passat VWX	64	2.0	4
	2013 Volkswagen	Volkswagen	Passat VWX	83	2.5	5
	2013 Volkswagen	Volkswagen	Passat VWX	82	2.5	5
	2013 Volkswagen	Volkswagen	Passat VWX	63	3.6	6
	2013 Volkswagen	Volkswagen	TIGUAN VWX	68	2.0	4
	2013 Volkswagen	Volkswagen	TIGUAN VWX	56	2.0	4
	2013 Volkswagen	Volkswagen	TIGUAN 4MOTION	55	2.0	4
Diesel;	2013 Volkswagen	Volkswagen	TOUAREG VWX	54	3.0	6
	2013 Volkswagen	Volkswagen	TOUAREG VWX	78	3.6	6
Hybrid;	2013 Volkswagen	Volkswagen	Touareg H VWX	75	3.0	6



Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S6)	21	28	24				26.6	38.2	30.8102
Auto(AM-S6)	30	42	34				39.0935	59.3437	46.1856
Manual(M6)	21	30	24				25.3	40.3	30.3902
Auto(AM-S6)	21	28	24				27.2	37.1	30.9119
Auto(AV-S6)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	24	30	26				30.4	39.9	34.048
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(AM-S7)	16	23	18				19.1	30	22.8332
Auto(AM-S7)	16	22	18				19.2	28.9	22.6159
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	26	21				22.1	34.7	26.4165
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Manual(M6)	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	12	21	15				15.4	26.3	19.3741
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	12	20	15				14.4	26.7	18.1658
Auto(S6)	12	19	14				13.9	24.7	17.3049

Auto(S8)	11	18	13	12.9	21.8	15.8033
Auto(AM-S7)	8	15	10	10	17.9	12.4782
Auto(AM-S7)	11	18	13	12.6	25.2	16.2581
Auto(AM-S7)	10	16	12	11.5	21.2	14.4817
Auto(AM-S6)	13	20	16	16.1	25.4	19.276
Manual(M6)	12	20	15	14	24	17.2308
Auto(AM-S6)	13	20	16	16	25.4	19.197
Manual(M6)	12	20	14	13	22.6	16.0722
Auto(AM-S6)	29	39	32	37.3	55.3	43.7011
Auto(AM-S6)	22	30	25	26.5	42.0656	31.7942
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M5)	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S6)	21	29	24	26.8	40.2092	31.532
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S6)	22	31	25	26.977	42.4936	32.2814
Manual(M6)	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S6)	22	30	25	27.5	41.5	32.4219
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Manual(M6)	19	27	22	23.9	37.1	28.456
Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229
Manual(M6)	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M5)	24	34	28	28.8	46.2	34.6771
Manual(M6)	22	33	26	26.5556	44.9945	32.56
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S7)	41	46	43	55.4	65.2	59.419
Auto(AM-S6)	29	39	33	37.6	56.2	44.1798
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	30	40	34	37.9	56.8	44.5744
Manual(M6)	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M5)	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S6)	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Highway	Unrd	Comb	Unr	Guzzler?	Air Aspir	IAir Aspir	Trans	Trans Des	Trans, Otr	# Gears
21.3388	27.7919	23.8286			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	(e.g. Au
29.8946	41.5209	34.2046			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	(e.g. Au
20.8146	29.9953	24.1394			TC	Turbocharg	Ad		Manual		6
20.891	28.1035	23.6187			TC	Turbochar	Ad	AMS	Automate		6
23.6355	30.6684	26.3554			TC	Turbochar	Ad	SCV	Selectable		8
20.3576	29.8271	23.7508			TC	Turbocharg	Ad		Semi-Automatic		8
20.402	28.949	23.5279			TC	Turbocharg	Ad		Semi-Automatic		8
22.2425	32.0861	25.8049			TC	Turbocharg	Ad		Manual		6
23.6355	30.6684	26.3554			TC	Turbocharg	Ad	SCV	Selectable Continuously Variable		8 (e.g. C
20.3576	29.8271	23.7508			TC	Turbochar	Ad	SA	Semi-Auto		8
20.402	28.949	23.5279			TC	Turbochar	Ad	SA	Semi-Auto		8
20.3576	29.8271	23.7508			TC	Turbochar	Ad	SA	Semi-Auto		8
20.402	28.949	23.5279			TC	Turbocharg	Ad		Semi-Automatic		8
22.2425	32.0861	25.8049			TC	Turbocharg	Ad		Manual		6
24.5044	32.5529	27.5721			TC	Turbocharg	Ad	SCV	Selectable Continuously Variable		8 (e.g. C
20.3576	29.8271	23.7508			TC	Turbocharg	Ad		Semi-Automatic		8
18.3949	27.2332	21.5408			SC	Superchar	Ad	SA	Semi-Auto		8
17.8058	27.5484	21.1758			SC	Supercharg	Ad		Semi-Automatic		8
8(e)(4) reasons.] Please revise release date to the effective date when vehicles were relabelled;											
17.2616	28.4347	20.9695			TC	Turbocharg	Ad		Semi-Automatic		8
8(e)(4) reasons.] Please revise release date to the effective date when vehicles were relabelled;											
16.0273	25.8053	19.3219			TC	Turbocharg	Ad		Semi-Automatic		8
13.1387	20.6025	15.6978	G		NA	Naturally Aspirated			Semi-Automatic		8
19.9584	26.6824	22.5112			TC	Turbocharg	Ad		Semi-Automatic		8
19.9584	26.6824	22.5112			TC	Turbocharg	Ad		Semi-Automatic		8
19.7289	28.2351	22.823			TC	Turbocharg	Ad		Semi-Automatic		8
19.6619	27.5771	22.5781			TC	Turbocharg	Ad		Semi-Automatic		8
24.0075	29.7936	26.3065			TC	Turbocharg	Ad		Semi-Automatic		8
15.522	21.5458	17.7559			SC	Supercharg	Ad		Semi-Automatic		8
18.74	27.62	21.9099			TC	Turbocharg	Ad		Semi-Automatic		8
15.7409	23.3075	18.4339			NA	Naturally Aspirated	AMS		Automated Manual-	Selectable	7(e.g. Au
15.8793	22.1836	18.2078			NA	Naturally Aspirated	AMS		Automated Manual-	Selectable	7(e.g. Au
18.117	27.558	21.419			SC	Supercharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
17.0438	26.023	20.1767			SC	Supercharg	Ad		Manual		6
18.117	27.558	21.419			SC	Supercharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
17.0438	26.023	20.1767			SC	Supercharg	Ad		Manual		6
17.6699	25.953	20.6333			SC	Supercharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
16.761	26.9697	20.2022			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
16.761	26.9697	20.2022			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
15.2801	25.5632	18.6574			TC	Turbocharg	Ad		Semi-Automatic		8
22.407	31.1674	25.6515			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
22.407	31.1674	25.6515			TC	Turbocharg	Ad	AMS	Automated Manual-	Selectable	7(e.g. Au
17.751	25.2021	20.4751			TC	Turbocharg	Ad		Manual		6
11.2476	18.7327	13.7134	G		TC	Turbocharg	Ad		Semi-Automatic		6
15.0109	24.4645	18.1706			TC	Turbocharg	Ad		Semi-Automatic		8
11.5043	18.877	13.9574	G		TC	Turbocharg	Ad		Semi-Automatic		6
12.4737	21.0866	15.2827	G		TC	Turbochar	Ad	SA	Semi-Auto		8
14.0639	23.9773	17.2766	G		TC	Turbocharg	Ad		Semi-Automatic		8
11.2476	18.7327	13.7134	G		TC	Turbocharg	Ad		Semi-Automatic		6
12.0226	20.0478	14.6643	G		TC	Turbocharg	Ad		Semi-Automatic		8
11.5043	18.877	13.9574	G		TC	Turbocharg	Ad		Semi-Automatic		6

10.5402	17.7129	12.8889 G	TC	Turbocharged	Semi-Automatic	8
8.4232	14.7698	10.4424 G	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
10.6055	18.4729	13.1199 G	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
9.7957	16.2453	11.9264 G	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
13.4655	19.7573	15.718 G	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
12.0883	19.9831	14.7021 G	NA	Naturally Aspirated	Manual	6
13.3954	19.7741	15.6701 G	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
11.5388	19.5451	14.1465 G	NA	Naturally Aspirated	Manual	6
28.6469	38.87	32.4925	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
22.0202	29.5574	24.8746	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
27.8088	40.6616	32.4203	TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517	TC	Turbocharged	Manual	6
22.2864	28.5683	24.7338	NA	Naturally Aspirated	Semi-Automatic	6
21.7201	30.6767	25.0054	NA	Naturally Aspirated	Manual	5
21.1383	28.6751	23.9738	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
27.8088	40.6616	32.4203	TC	Turbocharged	Manual	6
20.5408	29.7034	23.8517	TC	Turbocharged	Manual	6
21.2302	26.9749	23.4804	NA	Naturally Aspirated	Semi-Automatic	6
21.8706	31.0367	25.2227	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
20.8232	31.7255	24.6324	TC	Turbocharged	Manual	6
17.4935	26.5716	20.6716	NA	Naturally Aspirated	Semi-Automatic	6
16.9415	25.219	19.8774	NA	Naturally Aspirated	Semi-Automatic	6
21.7634	30.1121	24.8658	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
29.8946	41.5209	34.2046	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
29.6183	41.8508	34.104	TC	Turbocharged	Manual	6
23.6446	31.0458	26.486	NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594	NA	Naturally Aspirated	Manual	5
19.278	26.8882	22.0917	TC	Turbocharged	Manual	6
24.2237	32.5108	27.3624	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
21.2839	30.8324	24.7304	TC	Turbocharged	Manual	6
23.7854	31.6043	26.7652	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
29.8946	41.5209	34.2046	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
23.1009	29.1554	25.4822	NA	Naturally Aspirated	Semi-Automatic	6
24.3944	33.6309	27.8344	NA	Naturally Aspirated	Manual	5
21.8931	32.6043	25.6912	TC	Turbocharged	Manual	6
29.6183	41.8508	34.104	TC	Turbocharged	Manual	6
23.6446	31.0458	26.486	NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594	NA	Naturally Aspirated	Manual	5
40.7039	45.7221	42.8187	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
28.8556	39.4682	32.8278	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
29.6183	41.8508	34.104	TC	Turbocharged	Manual	6
23.6446	31.0458	26.486	NA	Naturally Aspirated	Semi-Automatic	6
22.7343	32.7402	26.3594	NA	Naturally Aspirated	Manual	5
30.4633	40.2057	34.1916	TC	Turbocharged	Automated Manual-Selectable	7 (e.g. Au
30.8024	42.6219	35.1943	TC	Turbocharged	Manual	6
22.1078	30.6611	25.2814	NA	Naturally Aspirated	Semi-Automatic	6
21.8993	32.1378	25.5642	NA	Naturally Aspirated	Manual	5
19.7174	27.8048	22.6868	NA	Naturally Aspirated	Automated Manual-Selectable	7 (e.g. Au
20.6233	26.0617	22.7606	TC	Turbocharged	Semi-Automatic	6
18.1488	26.2617	21.0791	TC	Turbocharged	Manual	6
20.402	25.8545	22.5412	TC	Turbocharged	Semi-Automatic	6
19.649	28.9961	22.9829	TC	Turbocharged	Semi-Auto	8
17.0411	22.7325	19.2048	NA	Naturally Aspirated	Semi-Auto	8
19.8843	23.7762	21.4655	SC	Supercharged	Semi-Auto	8

Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Y	omated M	N	Manual with P	paddles) 2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) 2-Wheel D	DAEXV02.00U5N		5	DU	Diesel, ultra low s
N	N	N	F	2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel I	DADXV02.(	10		GP	Gasoline (F
MT	with padd	N	les) F	2-Wheel D	DADXV02.(	10		GP	Gasoline (F
Y	N	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXJ02.0FUB	85	406	GP	Gasoline (Premium
N	N	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
MT	with padd	N	les) F	2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel I	DADXV02.(	10		GP	Gasoline (F
Y	N	N	A	All Wheel I	DADXJ02.C	85	406	GP	Gasoline (F
Y	N	N	A	All Wheel I	DADXV02.(	10		GP	Gasoline (F
Y	N	N	A	All Wheel	DAEXJ02.0FUB	85	406	GP	Gasoline (Premium
N	N	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
MT	with padd	N	les) F	2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel I	DADXJ03.C	10		GP	Gasoline (F
Y	N	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel I	DADXJ03.C	10		GP	Gasoline (F
Y	N	N	A	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXV06.3UA8	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXJ02.0FUB	85	389	GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXT02.04UB	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXJ02.0FUB	85	447	GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXT02.0HUB	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXT03.0TLF	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXT03.03UG		5	DU	Diesel, ultra low s
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.23UL	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.23UL	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
N	N	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
N	N	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium
Y	omated M	N	Manual with P	paddles) All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium
N	N	N	A	All Wheel	DAEXV02.53UK	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	N	A	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	N	A	All Wheel I	DBEXV06.	85	364	GP	Gasoline (I
Y	N	N	A	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium
Y	N	N	A	All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium
Y	N	N	A	All Wheel	DBEXV06.04UC	85	357	GP	Gasoline (Premium
Y	N	N	A	All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium

Y	N	R	2-Wheel Drive	DBE/R06.84LA	10		GP	Gasoline (Premium
Y	omated Manual with P	addles)	All Wheel Drive	DBGTV08.0V16	10		GPR	Gasoline (Premium
Y	omated Manual with P	addles)	All Wheel Drive	DNEVXV06.5L83	10		GPR	Gasoline (Premium
Y	omated Manual with P	addles)	All Wheel Drive	DNEVXV06.5L83	10		GPR	Gasoline (Premium
Y	omated Manual with P	addles)	All Wheel Drive	DNEVXV05.2LR8	10		GP	Gasoline (Premium
N	N	A	All Wheel Drive	IDADXV05.	10		GP	Gasoline (I
Y	omated Manual with P	addles)	All Wheel Drive	DNEVXV05.2LR8	10		GP	Gasoline (Premium
N	N	A	All Wheel Drive	IDADXV05.	10		GP	Gasoline (I
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVEVXV03.6U46	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DNEVXV03.6U46	10		GP	Gasoline (Premium
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.03SA	10		GP	Gasoline (Premium
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
N	N	A	All Wheel Drive	DNEVXV02.03UA	10		GP	Gasoline (Premium
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.0U36	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.0U36	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV01.4PHE	10		GP	Gasoline (Premium
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV02.0U4S		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVEVXV02.0U4S		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVEVXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVEVXV02.5U3M	10		G	Gasoline (Regular
Y	omated Manual with P	addles)	2-Wheel Drive	DVEVXV03.6U41	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVEVXV02.03UA	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DNEVXJ02.03UA	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	IDADXT03.02UG		5	DU	Diesel, ultr
Y	N	A	All Wheel Drive	IDVWXT03.	10		GP	Gasoline (F
Y	N	A	All Wheel Drive	IDVWXT03.	10		GP	Gasoline (F

Product Name	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MARGeaded Release per gallon (15 pph)	Not exempt	89	20					
MARGeaded Release per gallon (15 pph)	Not exempt	89	20					
MARGeaded Release per gallon (15 pph)	Not exempt	89	20					
MARGeaded Release per gallon (15 pph)	Not exempt				89	20		
MARGeaded Release per gallon (15 pph)	Not exempt				91	12		
MARGeaded Release per gallon (15 pph)	Not exempt				91	12		
MARGeaded Release per gallon (15 pph)	Not exempt				91	12		
MARGeaded Release per gallon (15 pph)	Not exempt				91	12		
MARGeaded Release per gallon (15 pph)	Not exempt	81	10					
MARGeaded Release per gallon (15 pph)	Not exempt	81	10					
MARGeaded Release per gallon (15 pph)	Not exempt	81	10					
MARGeaded Release per gallon (15 pph)	Not exempt	84	12					
MARGeaded Release per gallon (15 pph)	Not exempt	84	12					
MARGeaded Release per gallon (15 pph)	Not exempt	84	12					
MARGeaded Release per gallon (15 pph)	Not exempt				98	16		
MARGeaded Release per gallon (15 pph)	Not exempt				98	16		
MARGeaded Release per gallon (15 pph)	Not exempt				98	16		
MARGeaded Release per gallon (15 pph)	Not exempt						94	25
MARGeaded Release per gallon (15 pph)	Not exempt				100	15		
MARGeaded Release per gallon (15 pph)	Not exempt				100	15		
MARGeaded Release per gallon (15 pph)	Not exempt				107	15		
MARGeaded Release per gallon (15 pph)	Not exempt				107	15		
MARGeaded Release per gallon (15 pph)	Not exempt				107	15		
MARGeaded Release per gallon (15 pph)	Not exempt				90	28		
MARGeaded Release per gallon (15 pph)	Not exempt				90	28		
MARGeaded Release per gallon (15 pph)	Truck							
MARGeaded Release per gallon (15 pph)	Truck							
MARGeaded Release per gallon (15 pph)	Truck							
MARGeaded Release per gallon (15 pph)	Truck							
MARGeaded Release per gallon (15 pph)	Truck							
MARGeaded Release per gallon (15 pph)	Not exempt	84	13					
MARGeaded Release per gallon (15 pph)	Not exempt	81	10					
MARGeaded Release per gallon (15 pph)	Not exempt				90	13		
MARGeaded Release per gallon (15 pph)	Not exempt				90	13		
MARGeaded Release per gallon (15 pph)	Not exempt	84	13					
MARGeaded Release per gallon (15 pph)	Not exempt	84	13					
MARGeaded Release per gallon (15 pph)	Not exempt	81	10					
MARGeaded Release per gallon (15 pph)	Not exempt				98	16		
MARGeaded Release per gallon (15 pph)	Not exempt						94	25
MARGeaded Release per gallon (15 pph)	Not exempt				100	15		
MARGeaded Release per gallon (15 pph)	Not exempt	74	13					
MARGeaded Release per gallon (15 pph)	Not exempt						74	13
MARGeaded Release per gallon (15 pph)	Not exempt	102	13					
MARGeaded Release per gallon (15 pph)	Not exempt	89	11					
MARGeaded Release per gallon (15 pph)	Not exempt	89	11					
MARGeaded Release per gallon (15 pph)	Not exempt	89	11					
MARGeaded Release per gallon (15 pph)	Not exempt	86	7					
MARGeaded Release per gallon (15 pph)	Not exempt	86	7					
MARGeaded Release per gallon (15 pph)	Not exempt	86	7					
MARGeaded Release per gallon (15 pph)	Not exempt	86	7					

MRC	Lead	Release	Not exempt	100	11		
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt				
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt			85	15
MRC	Lead	Release	Not exempt	81	7		
MRC	Lead	Release	Not exempt	81	7		
MRC	Lead	Release	Not exempt	81	7		
MRC	Lead	Release	Not exempt	81	7		
MRC	Lead	Release	Not exempt	94	13		
MRC	Lead	Release	Not exempt	94	13		
MRC	Lead	Release	Not exempt	94	13		
MRC	Lead	Release	Not exempt	94	13		
MRC	Lead	Release	Not exempt	77	11		
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt			94	15
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	94	16		
MRC	Lead	Release	Not exempt	92	33		
MRC	Lead	Release	Not exempt	92	33		
MRC	Lead	Release	Not exempt	92	33		
MRC	Lead	Release	Not exempt	92	33		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Not exempt	102	16		
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				
MRC	Lead	Release	Truck				



Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C	
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre	
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values	
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v	
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unroun	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG valuwe and	
2400	2400	corrected unadj unrnd city highway CO2 and then the reounded number is correct	17.8558
2200	2200		
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and	
2400	2400	corrected 14 20 16	17.8558
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and	
2400	2400	corrected unadj unrnd city highway CO2 and then the reounded number is correct	17.8558
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG valuwe and gallons per 100 value...these values were switched	
2600	2600		
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes	
2700	2700	600.314-08(e)(4); the label was recalulated after completion of EPA confirmatory testing and	
2700	2700	S/S set to yes	
2700	2700	the label was recalulated after completion of EPA confirmatory testing and then added new A	
3000	3000	S/S set to yes	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c	
2500	2500	14 18 15	17.1
2500	2500	corrected unadj unrounded highway and conbined values	
2500	2500	14 19 16	17.4
2200	2200		
3150	3150	CO2 corrections, again Aug 14th, Aug 23 CO2 rounding....adjusted whole CO2 from unadjuste	
2600	2600	CO2 corrections, additonal fuel costs in saving field, corrected Aug 14th	
3150	3150	CO2 corrections	
3150	3150	corrected city CO2 value, typo	
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected city unadj unrounded CO2 , Aug 14th	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected unadj and adj CO2 values, Aug 14th	
2850	2850	CO2 corrections	
2850	2850	CO2 corrections	
3000	3000		
2200	2200	CO2 corrections, Aug 14th correction	
2200	2200	CO2 corrections, Aug 14th	
2850	2850		
4050	4050	corrected unadj unrnd combined CO2 value Aug 14th	9.5
3150	3150		
4050	4050	correct adj unrounded 14 and rounded comb CO2 values Aug 14th	10.3
3800	3800	corrected 9 15 11	10.5
3350	3350		
4050	4050	corrected Comb adj unrnd CO2 10	9.5
3800	3800	corrected axle ratio 15 11	10.5
4050	4050	CO2 rounding correction on Aug 23rd	10.3

4400 4400  
 5700 5700 corrected lock out to "yes" and AMS.  
 4400 4400 lock up to YES., CO2 corrections Aug 14, S/S set to yes, CO2 rounding correction Aug 23rd  
 4750 4750 adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes  
 3550 3550 corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th  
 3800 3800 CO2 rounding correction Aug 23rd  
 3550 3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
 4050 4050 CO2 rounding Aug 23rd then again on Aug 27  
 1800 1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
 2300 2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 corrected CO2 values, corrected fuel cost over 5 years  
 2150 2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
 2150 2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
 2400 2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t  
 1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
 2400 2400 CO2 corrections, fuel spending corrected to \$400  
 2300 2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
 2300 2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
 2300 2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
 2700 2700 update after Verify release 10  
 2850 2850 UPDATE after Verify release 10  
 2300 2300 CO2 corrections  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 comb correction  
 2600 2600 CO2 corrections, CO2 rounding corrections Aug 20th  
 2100 2100 CO2 corrections  
 2300 2300 early label, update after Verify release 10  
 2100 2100 corrected unadjusted unrounded CO2 highway and combined values and combined adjusted w  
 1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
 2150 2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
 1900 1900 FE and GHG ratings corrected to 7  
 2200 2200 CO2 corrections  
 1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1350 1350 GHG rating corrected to 10, recalc with EPA confirmatory tests  
 1750 1750 CO2 corrections; inhouse derived 5-cycle formula corrected Aug 15th  
 1700 1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th, CO2 rounding corrections A  
 2050 2050 early label, update after Verify release 10, CO2 corrections  
 2050 2050 update after Verify release 10 issued, CO2 corrections  
 1700 1700  
 1650 1650  
 2150 2150 CO2 corrections  
 2050 2050 CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
 2500 2500 CO2 correction  
 2500 2500 corrected CO2 values, CO2 rounding corrections Aug 20th, rounding Aug 23rd  
 2700 2700 CO2 corrections, CO2 rounding corrections Aug 20th  
 2500 2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections, CO2 rounding c  
 2500 2500 CO2 corrections  
 3000 3000 CO2 correction Aug 15th, CO2 rounding corrections Aug 20th  
 2700 2700 CO2 corrections

# Highway Fuel Economy Data - Alternative Fuel

CO2

creation Aug 20th

value

added CO2 value again, second time Aug 14th

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85) PG	miles per gallon
---------	---------	---------	---------	--------	-----	---	------------------	------------------

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85) MPG	miles per g
---------	---------	---------	---------	--------	-----	---	-------------------	-------------

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85) PG	miles per gallon
---------	---------	---------	---------	--------	-----	---	------------------	------------------

then added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to yes

7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to yes

assumption to 6.2 per ASTM rounding procedure

city and highway CO2 values

25.6	20.1038	13.5432	18.3117	15.3409	253	E	Ethanol (E85) PG	miles per gallon
------	---------	---------	---------	---------	-----	---	------------------	------------------

27.1	20.7407	13.7947	19.3602	15.8444	314	E	Ethanol (E85) PG	miles per gallon
------	---------	---------	---------	---------	-----	---	------------------	------------------

and weighted values not CO2 to tenths value that is inputted into Verify.

city and highway CO2 value

city and highway CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85) PG	miles per gallon
------	---------	--------	---------	--------	-----	---	------------------	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85) PG	miles per gallon
------	--------	--------	---------	---------	-----	---	------------------	------------------

20.8	13.5107	8.8115	15.1054	10.8449	262	E	Ethanol (E85) MPG	miles per g
------	---------	--------	---------	---------	-----	---	-------------------	-------------

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85) PG	miles per gallon
------	---------	--------	---------	--------	-----	---	------------------	------------------

20.5	13.4531	8.6127	14.7094	10.5874	262	E	Ethanol (E85) PG	miles per gallon
------	---------	--------	---------	---------	-----	---	------------------	------------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85) PG	miles per gallon
------	--------	--------	---------	---------	-----	---	------------------	------------------

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

roup, CO2 rounding Aug 23rd  
nrounded highway and combined CO2 values  
o 29 MPG  
ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

ed MPG value  
nd corresponding 5-cycle values  
cted calculated values

ction Aug 20th  
rrections Aug 20th

hole CO2 value  
ction Aug 20th

rrections Aug 20th

ug 20th

orrections Aug 20th, CO2 rounding Aug 23rd

Relative Fuel	CO2	CO2	CO2	CO2	Fuel2 EPA	Intake Val	Exhaust V	Carline CI	Carline CI
2012 Ann City	CO2	CO2	CO2	CO2	Fuel2 EPA	Intake Val	Exhaust V	Carline CI	Carline CI
					SIDI;	2	27	Small Station Wag	
						2	27	Small Station Wag	
					SIDI;	2	27	Small Station Wag	
					SIDI;	2	27	Small Stati	
					SIDI;	2	24	Compact C	
					SIDI;	2	24	Compact Cars	
2900	439	302	377	2900	SIDI; FFV;	2	24	Compact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompa	
2900	439	302	377	2900	SIDI; FFV;	2	23	Subcompa	
					SIDI;	2	23	Subcompa	
2900	439	302	377	2900	SIDI; FFV;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Ca	
					SIDI;	2	25	Midsize Cars	
					SIDI; Unde	2	25	Midsize Ca	
					SIDI;	2	25	Midsize Cars	
					SIDI; Under EPA regulations, the manufacturer	2	26	Large Cars	
					SIDI;	2	26	Large Cars	
					SIDI;	2	27	Small Station Wag	
3100	458	338	404	3100	SIDI; FFV;	2	27	Small Station Wag	
					SIDI;	2	231	Small SUV 4WD	
2900	450	320	392	2900	SIDI; FFV;	2	231	Small SUV 4WD	
					SIDI;	2	231	Small SUV 4WD	
					SIDI;	2	233	Standard SUV 4W	
						2	233	Standard SUV 4W	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	24	Compact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	25	Midsize Cars	
					SIDI;	2	23	Subcompact Cars	
					SIDI;	2	21	Two Seaters	
					SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	25	Midsize Cars	
					SIDI;	2	24	Compact Cars	
4650	794	469	648	4650	FFV;	2	24	Compact Cars	
4250	711	410	576	4250	FFV;	2	24	Compact C	
					SIDI;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	23	Subcompact Cars	
4250	726	421	589	4250	FFV;	2	23	Subcompact Cars	
4650	794	469	648	4650	FFV;	2	23	Subcompact Cars	

	1	15	Midsize Cars
	2	21	Two Seaters
	2	21	Two Seaters
	2	21	Two Seaters
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
SIDI;	2	21	Two Seaters
SIDI;	2	21	Two Seate
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	23	Subcompact Cars
	2	23	Subcompact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	23	Subcompact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	1	14	Compact Cars
	1	14	Compact Cars
SIDI;	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
	2	24	Compact Cars
SIDI;	2	24	Compact Cars
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	27	Small Station Wag
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
	2	25	Midsize Cars
SIDI;	2	25	Midsize Cars
SIDI;	2	230	Small SUV 2WD
SIDI;	2	230	Small SUV 2WD
SIDI;	2	231	Small SUV 4WD
	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W
SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
cars	Derived 5-cycle label	6/22/2012	12265	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12092	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Derived 5-cycle label	8/28/2012	12549	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12093	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Derived 5-cycle label	8/28/2012	12551	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Derived 5-cycle label	8/28/2012	12550	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/21/2012	12228	N	N	
economy label values for 5-cycles were XX MPG city, XX MPG highway, and XX MPG combined; label val						
car	Vehicle Specific 5-cycle	8/15/2012	12227	N	N	
economy label values for 5-cycles were XX MPG city, XX MPG highway, and XX MPG combined; label val						
car	Vehicle Specific 5-cycle	8/15/2012	12226	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
cars	Derived 5-cycle label	4/26/2012	11490	N	N	
cars	Derived 5-cycle label	8/27/2012	12479	N	N	
	Vehicle Specific 5-cycle	7/11/2012	11319	N	N	
	Derived 5-cycle label	9/10/2012	12595	N	N	
	Vehicle Specific 5-cycle	9/28/2012	12158	N	N	
D	Derived 5-cycle label	6/11/2012	12437	N	N	
D	Vehicle Specific 5-cycle	7/16/2012	12105	N	N	
car	Vehicle Specific 5-cycle	8/8/2012	11510	N	N	
car	Vehicle Specific 5-cycle	12/11/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12106	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12108	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12111	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	8/21/2012	12122	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12115	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12113	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12116	N	N	
car	Vehicle Specific 5-cycle	4/9/2012	10208	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12119	N	N	
car	Vehicle Specific 5-cycle	9/28/2012	12641	N	N	
car	Vehicle Specific 5-cycle	4/9/2012	10207	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12117	N	N	
car	Vehicle Specific 5-cycle	9/28/2012	12640	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12440	N	N	

car	Vehicle Specific 5-cycle	6/20/2012	12211		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11087		N	N
car	Vehicle Specific 5-cycle	8/17/2012	12441		N	N
car	Vehicle Specific 5-cycle	6/14/2013	12234		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12128		N	N
car	Vehicle Specific 5-cycle	6/20/2012	12442		N	N
car	Vehicle Specific 5-cycle	6/21/2012	12130		N	N
car	Vehicle Specific 5-cycle	6/22/2012	12466		N	N
car	Derived 5-cycle label	7/19/2012	12135		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187		N	N
car	Derived 5-cycle label	6/25/2012	12272		N	N
car	Vehicle Specific 5-cycle	7/12/2012	12271		N	N
car	Vehicle Specific 5-cycle	7/30/2012	12435		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373		N	N
car	Derived 5-cycle label	7/30/2012	10277		N	N
car	Derived 5-cycle label	6/25/2012	12273		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10186		N	N
car	Vehicle Specific 5-cycle	7/25/2012	11044		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10532		N	N
car	Vehicle Specific 5-cycle	7/16/2012	10534		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527		N	N
car	Derived 5-cycle label	6/22/2012	12264		N	N
car	Derived 5-cycle label	6/25/2012	12268		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12277		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11531		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531		N	N
car	Vehicle Specific 5-cycle	6/18/2012	11372		N	N
car	Derived 5-cycle label	6/22/2012	12263		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300		N	N
car	Vehicle Specific 5-cycle	6/16/2012	11532		N	N
car	Derived 5-cycle label	6/25/2012	12267		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535		N	N
car	Derived Vehicle Specific 5-cycle	6/19/2012	12658	Calculation Approach for city label but Modified 5-cycle Calculation Appr	N	N
car	Derived 5-cycle label	6/25/2012	12151		N	N
car	Derived 5-cycle label	6/25/2012	12266		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11534		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11536		N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163		N	N
car	Vehicle Specific 5-cycle	6/21/2012	11539		N	N
car	Vehicle Specific 5-cycle	6/21/2012	11547		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554		N	N
	Derived 5-cycle label	6/18/2012	12432		N	N
	Vehicle Specific 5-cycle	6/11/2012	12276		N	N
	Derived 5-cycle label	6/11/2012	12431		N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563		N	N
D	Derived 5-cycle label	6/25/2012	12278		N	N
D	Derived 5-cycle label	6/25/2012	11559		N	N



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N	N		Cylinder deactivation Variable / Fueling 3 and 5 closing of intake and exhaust valves
N	N	CHARGE AIR COOLER (AIR / LIQUID) -- SFI/AIR/BT A/2000/4MT/CWT/2100C/SINOZS/2115/d	Variable / Mechanical
N	N		ELECTRONICALLY CONTROLLED INLET / EXHAUST VALVE
N	N		ELECTRONICALLY CONTROLLED INLET / EXHAUST VALVE
N	N	ENGINE CODE CEH (GALLARDO COUPE AND SPIDER)	INLET CONTINUOUSLY VARIABLE / MECHANICAL
N	N	ENGINE CN	Y INLET ANIN
N	N	ENGINE CODE CEH (GALLARDO COUPE AND SPIDER)	INLET CONTINUOUSLY VARIABLE / MECHANICAL
N	N	ENGINE CN	Y INLET ANIN
N	N		N
N	N		Y position of Intake/exhaust camshaft electronically
N	N		N
N	N		Y position of Intake/exhaust camshaft electronically
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N		Y position of Intake/exhaust camshaft electronically
N	N		N
N	N		Y position of Intake/exhaust camshaft electronically
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N		Y position of Intake/exhaust camshaft electronically
N	N		Y position of Intake/exhaust camshaft electronically
N	N		Y position of Intake/exhaust camshaft electronically
N	N		Y position of Intake/exhaust camshaft electronically
N	N		Y position of Intake/exhaust camshaft electronically
N	N		CONTINUOUS VARIABLE VALVE TIMING
N	N		N
N	N		N
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	ENGINE CODE CDMA ONLY.	Y CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y CONTINUOUS VARIABLE VALVE TIMING
N	N	ENGINE CODE CDMA ONLY.	Y CONTINUOUS VARIABLE VALVE TIMING
N	N		Y position of Intake/exhaust camshaft electronically
N	N		N
N	N		N
N	N		N
N	N		Y position of Intake/exhaust camshaft electronically
N	N		N
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
Nach for Highway label	N		MECHANICAL HYDRAULIC VVT SYSTEM ON INTAKE AND EXHAUST
N	N		N
N	N		N
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N	SCR Equipped	N
N	N	SCR Equipped	N
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N		Y INLET CONTINUOUSLY VARIABLE / MECHANICAL H
N	N		Y Electronic Control / Hydraulic adjustment
N	N		Y position of Intake/exhaust camshaft electronically
N	N		Y position of Intake/exhaust camshaft electronically
N	N		Y position of Intake/exhaust camshaft electronically
N	N		N
N	N		Y INTAKE / EN
N	N	V6 CYLINDER	Y MECANICAL Battery(s)

Device Desig	Battery #	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit
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These observations are for the purpose of the investigation and are not intended to be used for any other purpose. The information is being provided for your information only and is not intended to be used for any other purpose. The information is being provided for your information only and is not intended to be used for any other purpose.

1 Lithium Ion	266	5	37 On-Board
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STMENT

MECHANICAL-HYDRAULIC

These observations are for the purpose of the investigation and are not intended to be used for any other purpose. The information is being provided for your information only and is not intended to be used for any other purpose.

MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

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MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

aust valves on a single camshaft. No change in valve overlaps.

MECHANICAL-HYDRAULIC

CONTROLLED ELECTRONICALLY

CONTROLLED ELECTRONICALLY

MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

E / MECHANICAL-HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

HYDRAULIC

HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

electronically controlled and hydraulically adjusted

electronically controlled and hydraulically adjusted

HYDRAULIC

HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

HYDRAULIC

HYDRAULIC

INLET CAMS 1 Lithium Ion 220 5 27 On-Board

HYDRAULIC

HYDRAULIC

HYDRAULIC

HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

controlled and hydraulically adjusted

ELECTRONICALLY AND CONTROLLED ELECTRONICALLY

AMS 1 NiMH 288 6 21.5 On-Board

es(2)ine3 od gear at this loer, f GTg ea tter by lin 4eC, he ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km  
 es(2)ine3 od gear at this loer, f GTg ea tter by lin 4eC, he ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical Regen Brake	Both	Y	1AC Induction
------------------------	------	---	---------------

es(2)ine3 od gear at this loer, f GTg ea tter by lin 4eC, he ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km  
 es(2)ine3 od gear at this loer, f GTg ea tter by lin 4eC, he ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km  
 es(2)ine3 od gear at this loer, f GTg ea tter by lin 4eC, he ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GTg ea tter by lin 4eC, he ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

es(2)ine3 od gear at this loer, f GTg ea tter by lin 4eC, he ag is ne speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical REGEN BRAKE PEDAL TRIGGERED REGENERATIVE

1Other

Other BRAKE PEDBoth N

1Other

Motor	Ger	Rated Mot	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Meter	Fuel Cell V	Off Board	Camless V	Oil Viscosi
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			CRDI	Common Rail	Direct Diesel Injection	N				5W40
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignit	N	N				5W40
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
h			GDI	Spark Ignit		N				5W40 VW
			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
		40	GDI	Spark Ignit	N Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			CRDI	Common Rail	Direct Diesel Injection	N				5W30 VW 50700
			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
			GDI	Spark Ignition	Direct Injection	N				5W40 VW 50200
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			GDI	Spark Ignit	N Direct Injection	N				5W40
			GDI	Spark Ignit	N Direct Injection	N				5W40
			GDI	Spark Ignit	N Direct Injection	N				5W40 VW 50200
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00
			MFI	Multipoint	N	N				5W30 VW
h			GDI	Spark Ignition	Direct Injection	N				5W30 VW 50400 /
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00
			MFI	Multipoint	Sequential fuel injection	N				5W30 VW 504 00

### 3 PHASE PERMANENT MAGNET

MFI	Multipoint/sequential fuel inject	N	0W40 / VW50200
MFI	Multipoint/sequential fuel inject	N	10W60 VW 50101
MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
GDI	Spark Ignit	N	10W60 VW
GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
GDI	Spark Ignit	N	10W60 VW
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignition Direct Injection	N	5W40 / VW50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common F	N	5W30 VW
GDI	Spark Ignit	N	5W40 VW
GDI	Spark Ignit	N	5W40 VW



Stop/Start Stop/Start Trans in FE Trans as I Model Type Charge De Charge De Charge Su Charge Su EPA Calcul

N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6) 3 frt manual
N	No	Auto(AM-S6)	Auto(AM-S6) A3 quattro
N	No	Auto(AV-S6)	Auto(AV-S6)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8) Audi A6 CVT
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi A6 qu
Y	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi Q7
N	No	Auto(S8)	Auto(S8)
N0700	No	Auto(AM-S7)	Auto(AM-S7)
N0700	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
N0700	No	Auto(AM-S7)	Auto(AM-S7)
N0700	No	Auto(AM-S7)	Auto(AM-S7)
N0700	No	Auto(S8)	Auto(S8)
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Manual(M6)	Manual(M6) TRS
N	No	Auto(S6)	Auto(S6)
N0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
N0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)

VW50500	No	Auto(S8) Auto(S8)
N 50500	No	Auto(AM-S7) Auto(AM-S7)
50700	Yes	Auto(AM-S7) Auto(AM-S7)
50700	Yes	Auto(AM-S7) Auto(AM-S7)
N 50500	No	Auto(AM-S6) Auto(AM-S6)
N 50500	No	Manual(M6) Manual(M6) Gallardo C
N 50500	No	Auto(AM-S6) Auto(AM-S6)
N 50500	No	Manual(M6) Manual(M6) Gallardo S
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) C M6
N	No	Auto(S6) Auto(S6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S7) Auto(AM-S7)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Tiguan front
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Touareg H

Product Name	Weight (lb)	EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA SmSmartWay
	30.8		6	6 DAD XV02.03PA	7	
	46.2		9	8 DVW XV02.0U5N	5	
	30.4		6	6 DAD XV02.03PA	7	
	30.9		6	6 DAD XV02.0	5	
	35.2		7	7 DAD XV02.0	5	
	30.8		6	6 DAD XV02.03UB	5	
	30.9		6	6 DAD XJ02.0FUB	5	
	33.2		7	7 DAD XV02.03UB	5	
	35.2		7	7 DAD XV02.03UB	5	
	30.8		6	6 DAD XV02.0	5	
	30.9		6	6 DAD XJ02.0	5	
	30.8		6	6 DAD XV02.0	5	
	30.9		6	6 DAD XJ02.0FUB	5	
	33.2		7	7 DAD XV02.03UB	5	
	36.9		7	7 DAD XV02.03UB	5	
	30.8		6	6 DAD XV02.03UB	5	
	28.1		5	5 DAD XJ03.0	5	
	27.5		5	5 DAD XJ03.03UF	5	
	27.5		5	5 DAD XJ03.0	5	
	27.1		5	5 DAD XV04.03UJ	5	
	27.5		5	5 DAD XJ03.03UF	5	
	24.4		4	4 DAD XV04.03UJ	5	
	19.3		3	3 DVW XV06.3UA8	5	
	29.5		6	6 DAD XV02.03UB	5	
	29.5		6	6 DAD XJ02.0FUB	5	
	28.8		6	6 DAD XT02.04UB	5	
	29.6		6	6 DAD XJ02.0FUB	5	
	34		7	7 DAD XT02.0HUB	5	
	22.9		4	4 DAD XT03.0TLF	5	
	28.1		5	4 DAD XT03.03UG	5	
	23		4	4 DAD XV04.23UL	5	
	22.6		4	4 DAD XV04.23UL	5	
	26.9		5	5 DAD XJ03.03UF	5	
	23.5		5	5 DAD XJ03.03UF	5	
	26.9		5	5 DAD XJ03.03UF	5	
	23.5		5	5 DAD XJ03.03UF	5	
	26.4		5	5 DAD XJ03.03UF	5	
	25.5		5	5 DAD XV04.03UJ	5	
	25.5		5	5 DAD XV04.03UJ	5	
	23.6		4	4 DAD XV04.03UJ	5	
	33.3		7	7 DAD XV02.03UA	5	
	33.3		7	7 DAD XV02.03UA	5	
	25.6		5	5 DAD XV02.53UK	5	
	17.2		2	2 DBEXV06.0501	5	
	23.6		4	4 DAD XV04.03UJ	5	
	17.4		2	2 DBEXV06.0501	5	
	19.4		3	3 DBEXV06.	5	
	21.8		4	4 DAD XV04.03UJ	5	
	17.2		2	2 DBEXV06.0501	5	
	18.2		3	3 DBEXV06.04UC	5	
	17.4		2	2 DBEXV06.0501	5	

15.9		2	2 DBEXV06.84LA	5
12.6		1	1 DBGTV08.0V16	5
16.4		2	2 DNLXV06.5L83	5
14.5		1	1 DNLXV06.5L83	5
19.4		3	3 DADXV05.2LR8	5
17.4		3	3 DADXV05.	5
19.3		3	3 DADXV05.2LR8	5
16.1		2	2 DADXV05.	5
43.7		8	7 DVWXV02.0U5N	5
31.8		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
31.6		6	6 DVWXV02.5A59	7
31.9		6	6 DVWXV02.5M59	7
31.5		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
30.3		6	6 DVWXV02.5A59	7
32.3		6	6 DVWXV02.03PA	7
31.8		6	6 DVWXV02.03PA	7
25.8		5	5 DVWXV03.6U46	5
24.8		5	5 DVWXV03.6U46	5
32.4		6	6 DVWXV02.03SA	5
46.2		9	8 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
28.5		5	5 DADXV02.03UA	5
34.8		7	7 DADXV02.03PA	7
31.2		6	6 DADXV02.03PA	7
35		7	7 DVWXV02.03PA	7
46.2		9	8 DVWXV02.0U5N	5
32.9		6	6 DVWXV02.0U36	5
34.7		7	7 DVWXV02.0U36	5
32.6		7	7 DVWXV02.03PA	7
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
59.4		10	10 DVWXV01.4PHE	7
44.2		8	7 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
44.6		9	8 DVWXV02.0U4S	5
46.4		9	8 DVWXV02.0U4S	5
31.9		6	6 DVWXV02.5A59	7
31.7		7	7 DVWXV02.5M59	7
28.5		6	6 DVWXV03.6U41	5
29.9		6	6 DVWXJ02.03UA	5
26.4		5	5 DVWXJ02.03UA	5
29.6		6	6 DVWXJ02.03UA	5
23.3		6	5 DADXT03.(	5
25		4	4 DVWXT03.	5
28.2		5	5 DVWXT03.	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DADXV02.03UA 5

DADXV02.03UA 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

Model	Year	City CO2	Highway CO2	Comb CO2	CO2- Vol	CO2- Vol	CO2- Vol
Highway Fuel Economy (mpg) City CO2 (g/km) Highway CO2 (g/km) Comb CO2 (g/km) CO2- Vol (kg/year) CO2- Vol (kg/year) CO2- Vol (kg/year)							
		400	432	319	381		
3100			340	245	297		
		400	442	296	376		
		400	442	316	385		
600			373	304	342		
		400	437	297	374		
		400	435	306	377		
600			397	276	343		
600			373	304	342		
		400	437	297	374		
		400	435	306	377		
		400	437	297	374		
		400	435	306	377		
600			397	276	343		
1350			360	272	320		
		400	437	297	374		
		1400	482	326	412		
		1900	498	321	418		
		1900	498	321	418		
		1900	515	313	424		
		1900	498	321	418		
		3400	554	345	460		
		6150	675	430	565		
		900	444	333	394		
		900	444	333	394		
		900	450	314	389		
		900	452	322	393		
600			369	298	337		
		4150	573	411	500		
		1400	541	369	464		
		4150	562	379	480		
		4150	558	398	486		
		1900	488	321	413		
		2650	441	355	402		
		1900	488	321	413		
		2650	441	355	402		
		1900	500	341	429		
		2650	530	330	440		
		2650	530	330	440		
		3400	580	347	475		
600			394	284	345		
600			394	284	345		
		2650	499	350	432		
		8650	787	474	646		
		4150	590	364	488		
		8650	768	469	633		
		7400	710	421	580		
		5150	638	370	517		
		8650	787	474	646		
		7400	736	443	604		
		8650	768	469	633		

	10400	840	501	688
	16900	1050	599	847
	10400	836	481	676
	12150	902	547	742
	6150	657	447	562
	7400	734	511	634
	6150	660	446	564
	8650	768	452	626
2600		354	262	313
100		401	291	351
2600		365	250	313
	400	430	298	371
850		396	310	358
850		408	289	354
	400	421	310	371
2600		365	250	313
	400	430	298	371
100		418	329	378
100		403	283	349
100		425	279	360
	1900	507	334	429
	2650	523	351	446
100		405	257	338
3100		340	245	297
3100		342	243	297
1350		374	286	334
1350		388	271	335
	1400	460	330	401
1100		379	271	331
100		416	287	358
1100		372	280	331
3100		340	245	297
850		381	299	344
2100		361	262	316
600		403	272	344
3100		342	243	297
1350		374	286	334
1350		388	271	335
4850		219	194	208
2850		352	258	310
3100		342	243	297
1350		374	286	334
1350		388	271	335
3100		331	240	290
3350		330	239	289
850		401	289	351
1350		391	275	339
	900	449	319	390
	900	430	341	390
	1900	484	336	417
	900	435	343	394
	900	517	351	442
	3400	520	391	462
	1900	447	372	413



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690	408	563.1	840.4	501	687.7
885	495	709.5	1050.2	598.8	847.1
705	353	546.6	836	481	676.2
771	418	612.2	902	547	742.2
552	349	460.6	657	447	562.5
635	370	515.8	734	511	633.6
556	348	462.4	660	446	563.7
681	391	550.5	768	452	625.8
272	184	232.4	354.3	261.8	312.7
334.3	211.2	278.9	401	290.6	351.3
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
323.7	227.6	280.5	396.3	310.3	357.6
335.2	207.2	277.6	407.6	288.8	354.1
332	220.9	282	421	310	371
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
335.4	235.6	290.5	418.2	329.4	378.2
327.2	207.7	273.4	402.8	282.7	348.8
346.3	202.5	281.6	425.2	279.3	359.5
419	253	344.3	506.7	333.8	428.9
434	265	358	523	351.1	445.6
321	213	272.4	404.7	256.6	338.1
259.8	171.2	219.9	339.8	244.6	297
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
372	240	312.6	459.5	330.5	401.4
295.1	203.2	253.7	379.2	271.3	330.6
340.4	215.5	284.2	415.9	287	357.9
300.9	196.7	254	372	280.4	330.8
259.8	171.2	219.9	339.8	244.6	297
315	214	269.6	381.3	298.8	344.2
307	192	255.2	360.5	262	316.2
333.9	197.2	272.4	403.3	271.8	344.1
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
161	137	150.2	219	193.9	207.7
270	181	230	351.9	257.7	309.5
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
268	179	228	331	240	290
266	162	219.2	330	239	289
328.2	217.8	278.5	400.9	289.4	350.7
339.6	206.8	279.8	391.3	275	339
372	238	311.7	449	319	390.5
339.6	244.4	296.8	429.9	341.3	390
407	248	335.4	484	336	417.4
343.6	246	299.7	434.6	343.5	393.6
422	248	343.7	517	351	442.3
416	281	355.2	520.1	390.6	461.8
354	267	314.8	446.9	371.8	413.1

City	Wounded to come 10 miles) DISTANCE	Comb Vol HigherFinal Label	EPA_FUEL	EPA_GHG	EPA_AMT
	N	4.2	4.2		
	N	2.9	2.9		
	N	4.2	4.2		
	N	4.2	4.2		
	N	3.8	3.8		
	N	4.2	4.2		
	N	4.2	4.2		
	N	3.8	3.8		
	N	3.8	3.8		
	N	4.2	4.2		
	N	4.2	4.2		
	N	4.2	4.2		
	N	4.2	4.2		
	N	3.8	3.8		
	N	3.6	3.6		
	N	4.2	4.2		
	N	4.5	4.5		
	N	4.8	4.8		
	N	4.8	4.8		
	N	4.8	4.8		
	N	4.8	4.8		
	N	5.3	5.3		
	N	6.2	6.2		
	N	4.3	4.3		
	N	4.3	4.3		
	N	4.3	4.3		
	N	4.3	4.3		
	N	3.8	3.8		
	N	5.6	5.6		
	N	4.5	4.5		
	N	5.6	5.6		
	N	5.6	5.6		
	N	4.8	4.8		
	N	5	5		
	N	4.8	4.8		
	N	5	5		
	N	4.8	4.8		
	N	5	5		
	N	5	5		
	N	5.3	5.3		
	N	3.8	3.8		
	N	3.8	3.8		
	N	5	5		
	N	7.1	7.1		
	N	5.6	5.6		
	N	7.1	7.1		
	N	6.7	6.7		
	N	5.9	5.9		
	N	7.1	7.1		
	N	6.7	6.7		
	N	7.1	7.1		

N	7.7	7.7
N	10	10
N	7.7	7.7
N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	3.1	3.1
N	4	4
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.3	2.3
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8

2017-FFP\_005368



Mr. Richard E Thomas Jr.  
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Mr. Richard 6

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Mr. Richard 3

Mr. Richard E Thomas Jr.  
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Mr. Richard E Thomas Jr.

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**To:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**Cc:** Roberts French/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA[]; avid Good/AA/USEPA/US@EPA[]  
**From:** "Hopson, Janet L."  
**Sent:** Fri 10/5/2012 2:58:42 PM  
**Subject:** RE: Release Dates and Guide Web Site  
<mailto:hopsonjl@ornl.gov>  
[\[mailto:Richard.Thomas@vw.com\]](mailto:Richard.Thomas@vw.com)  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

Richard:

That Jetta Hybrid is in the printed guide data set. I don't think the guide would be mailed out until after November 19. Please let Dave know if you want it removed.

Janet

From: Thomas, Richard (EEO) [mailto:Richard.Thomas@vw.com]  
Sent: Friday, October 05, 2012 10:48 AM  
To: Hopson, Janet L.  
Cc: Roberts French  
Subject: RE: Release Dates and Guide Web Site

Hi Janet;

Thanks for getting back to me so quickly. I just want to verify that 2013 label index 100, the Jetta Hybrid carline is not made public yet. I can check with Dave on Tuesday to see if the Jetta Hybrid was sent in August for the printed guide, I don't think it was.

From: Hopson, Janet L. [mailto:hopsonjl@ornl.gov]  
Sent: Friday, October 05, 2012 10:38 AM  
To: Thomas, Richard (EEO)  
Cc: Roberts French  
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Sent: Friday, October 05, 2012 10:22 AM  
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Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

**To:** David Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Fri 10/5/2012 6:24:08 PM  
**Subject:** FW: Release Dates and Guide Web Site  
[winmail.dat](#)

Hi Dave;

Can we discuss when you are in Tuesday?

Thanks,  
Richard

From: Hopson, Janet L. [mailto:hopsonjl@ornl.gov]  
Sent: Friday, October 05, 2012 10:59 AM  
To: Thomas, Richard (EEO)  
Cc: Roberts French; David Good  
Subject: RE: Release Dates and Guide Web Site

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VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com<mailto:Richard.Thomas@VW.com>

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**Cc:** Roberts French  
**Subject:** Release Dates and Guide Web Site

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Richard

*Richard E. Thomas*  
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3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 10/10/2012 10:59:42 AM  
**Subject:** VW Group - Decision Info submitted V10 R8

Hello Jim,

We have recently submitted decision information datasets for 2 new (FEDV) configurations for Audi MY 2013 test group DADXV05.2LR8:

Vehicle / configuration	Models	Type
DAV-558 / 0	R8 Spyder	FEDV
DAV-558 / 1	R8 Coupe	FEDV

These vehicles have a new 7 speed automatic transmission which will represent SOP for these models (the R8's are currently certified in this test group with a 6 speed transmission as the worst case vehicle).

We are also submitting a running change letter for the new transmission.

Note, there is no change for the existing worst case tests since they represent the Lamborghini models.

Please let me know if you have questions.

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** Roberts French/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Thur 10/11/2012 12:34:21 PM  
**Subject:** Published Fuel Economy Guide  
[winmail.dat](#)

Hello Dave;

Volkswagen has decided to not include the 2013 Jetta Hybrid, label index # 100, in the published fuel economy guide. Details regarding the current configuration will be provided in the near future. Please see that fuel economy label index # 100, for the Jetta Hybrid, is withdrawn from the information that was sent to Washington at the end of August.

Best regards,  
Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)<<mailto:Richard.Thomas@VW.com>>

Hello Dave;

Volkswagen has decided to not include the 2013 Jetta Hybrid, label index # 100, in the published fuel economy guide. Details regarding the current configuration will be provided in the near future. Please see that fuel economy label index # 100, for the Jetta Hybrid, is withdrawn from the information that was sent to Washington at the end of August.

Best regards,

Richard

*Richard E. Thomas*

VOLKSWAGEN Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Engineering and Environmental Office (EEO)

Phone: 248 754-4213

Fax: 248 754-4207

[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; avidA  
Wright/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 10/11/2012 5:28:15 PM  
**Subject:** RE: VW Group - Decision Info submitted V10 R8

Hello Jim / David,

A correction has been made for to both the running change and decision request for the R8 Spyder. The R8 Spyder with the new automatic 7 speed transmission will be the new worst case vehicle for this test group after all.

Vehicle / configuration	Models	Type
DAV-558 / 0	R8 Spyder	FEDV EDV
DAV-558 / 1	R8 Coupe	FEDV

From: Giles, Michael (EEO)  
Sent: Wednesday, October 10, 2012 7:00 AM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov)  
Cc: Rodgers, William  
Subject: VW Group - Decision Info submitted V10 R8

Hello Jim,

We have recently submitted decision information datasets for 2 new (FEDV) configurations for Audi MY 2013 test group DADXV05.2LR8:

Vehicle / configuration	Models	Type
DAV-558 / 0	R8 Spyder	FEDV EDV
DAV-558 / 1	R8 Coupe	FEDV

These vehicles have a new 7 speed automatic transmission which will represent SOP for these models (the R8's are currently certified in this test group with a 6 speed transmission as the worst case vehicle).

We are also submitting a running change letter for the new transmission.

Note, there is no change for the existing worst case tests since they represent the Lamborghini models.

Please let me know if you have questions.

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; avidA Wright/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; incent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 10/15/2012 5:02:24 PM  
**Subject:** VW Group - HJetta Hybrid Release requested

Hello Jim, David and Vince,

Just to follow up on voice messages that Richard and I have left - We are requesting that the Jetta Hybrid be released.

We would like to try and pick it up this afternoon if possible. Please let us know the outcome at your earliest convenience.

Thanks,  
Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Rhodes, Brian (EEO)" [Brian.Rhodes@vw.com]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; im Snyder/AA/USEPA/US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 10/15/2012 7:48:18 PM  
**Subject:** RE: VW Group - Jetta Hybrid Release requested  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)  
[Wright.DavidA@epamail.epa.gov](mailto:Wright.DavidA@epamail.epa.gov)  
[Mazaitis.Vincent@epamail.epa.gov](mailto:Mazaitis.Vincent@epamail.epa.gov)  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)

Hello Brian,

I talked to Jim Snyder and he is in the process of releasing the Jetta Hybrid. As we discussed, please pick it up tomorrow.

Hello Juergen:

I will send you the connector from the vehicle tomorrow by Fedex. Please let me know if you need 24 hour delivery.

Regards,

Mike

From: Giles, Michael (EEO)  
Sent: Monday, October 15, 2012 1:03 PM  
To: Rhodes, Brian (EEO)  
Cc: Thomas, Richard (EEO) (Richard.Thomas@vw.com)  
Subject: FW: VW Group - HJetta Hybrid Release requested

Brian –

We will let you know when we get the ok.



From: Giles, Michael (EEO)  
Sent: Monday, October 15, 2012 1:02 PM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov); DavidA Wright (Wright.DavidA@epamail.epa.gov); Vincent Mazaitis (Mazaitis.Vincent@epamail.epa.gov)  
Cc: Thomas, Richard (EEO) (Richard.Thomas@vw.com)  
Subject: VW Group - HJetta Hybrid Release requested

Hello Jim, David and Vince,

Just to follow up on voice messages that Richard and I have left - We are requesting that the Jetta Hybrid be released.

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Mike

Michael Giles

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United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA]  
**Cc:** "Rhodes, Brian (EEO)" [Brian.Rhodes@vw.com]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 10/15/2012 9:03:34 PM  
**Subject:** RE: VW Group - Jetta Hybrid Release requested  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)  
[Wright.DavidA@epamail.epa.gov](mailto:Wright.DavidA@epamail.epa.gov)  
[Mazaitis.Vincent@epamail.epa.gov](mailto:Mazaitis.Vincent@epamail.epa.gov)  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)

Mike, I signed off the vehicle and told Ben Haynes that VW is planning to pick it up tomorrow.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: "Rhodes, Brian (EEO)" <Brian.Rhodes@vw.com>  
Cc: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Rodgers, William (EEO)" <William.Rodgers@vw.com>, Jim Snyder/AA/USEPA/US@EPA, "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>  
Date: 10/15/2012 03:49 PM  
Subject: RE: VW Group - Jetta Hybrid Release requested

Hello Brian,

I talked to Jim Snyder and he is in the process of releasing the Jetta Hybrid. As we discussed, please pick it up tomorrow.

Hello Juergen:

I will send you the connector from the vehicle tomorrow by Fedex. Please let me know if you need 24 hour delivery.

Regards,  
Mike

From: Giles, Michael (EEO)  
Sent: Monday, October 15, 2012 1:03 PM  
To: Rhodes, Brian (EEO)  
Cc: Thomas, Richard (EEO) (Richard.Thomas@vw.com)  
Subject: FW: VW Group - HJetta Hybrid Release requested

Brian –

We will let you know when we get the ok.

From: Giles, Michael (EEO)  
Sent: Monday, October 15, 2012 1:02 PM  
To: Jim Snyder (Snyder.Jim@epamail.epa.gov); DavidA Wright (Wright.DavidA@epamail.epa.gov); Vincent Mazaitis (Mazaitis.Vincent@epamail.epa.gov)  
Cc: Thomas, Richard (EEO) (Richard.Thomas@vw.com)  
Subject: VW Group - HJetta Hybrid Release requested

Hello Jim, David and Vince,

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We would like to try and pick it up this afternoon if possible. Please let us know the outcome at your earliest convenience.

Thanks,  
Mike  
Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 10/16/2012 5:40:13 PM  
**Subject:** Beetle

Hi Jim,

Thanks for the feedback earlier about the Beetle. I passed along your comments that it might be possible to use another vehicle if need be.

I'll let you know what the plan is when it becomes known.

Thanks again,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

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3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

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FAX +1-248-754-4207

**To:** richard.thomas@vw.com[]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com[];  
liver.schmidt@vw.com[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Tue 10/16/2012 8:38:05 PM  
**Subject:** re: 2013 FE Guide - Errors in EPA's data base as of Oct 15, 2012 which held up  
posting on [www.fueleconomy.gov](http://www.fueleconomy.gov)  
[VW Group 2013 FE Guide1-all-rel dates-no-sales 10-15-2012.xlsx](#)

Richard,

Attached are the data in Verify as of Oct 15, 2012. Labels with pea green fill in the first few columns were not sent to DOE on Oct 16, 2012 for posting on the web. The next normal posting will be November 1, 2012.

Please make any needed corrections as soon as possible.

Thanks

EPA comr	VERIFY cc	Model Yr (Mfr Name	Division (C	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013 Audi	Audi	A3	ADX	59	2.0 4
Diesel;		2013 Audi	Audi	A3	ADX	73	2.0 4
		2013 Audi	Audi	A3	ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013 Audi	Audi	A4	ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	102	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX quattro	39	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX quattro	104	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	103	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013 Audi	Audi	A6	ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled.	Please include in model type comment field the reason for relabeling (if not already pro	2013 Audi	Audi	A8	ADX	128	4.0 8
Relabeled.	Please include in model type comment field the reason for relabeling (if not already pro	2013 Audi	Audi	A8	ADX	98	4.0 8
		2013 Audi	Audi	A8L	ADX	97	4.0 8
		2013 Audi	Audi	A8L	ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro	ADX	101	2.0 4
		2013 Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013 Audi	Audi	Q5	ADX	91	2.0 4
		2013 Audi	Audi	Q5	ADX	105	2.0 4
Error in co		2013 Audi	Audi	Q5	ADX	106	3.0 6
Hybrid;		2013 Audi	Audi	Q5 Hybrid	ADX	95	2.0 4
Diesel;		2013 Audi	Audi	Q7	ADX	53	3.0 6
		2013 Audi	Audi	Q7	ADX	61	3.0 6
		2013 Audi	Audi	RS5	ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
		2013 Audi	Audi	S4	ADX	42	3.0 6
		2013 Audi	Audi	S4	ADX	45	3.0 6
		2013 Audi	Audi	S5	ADX	43	3.0 6
		2013 Audi	Audi	S5	ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013 Audi	Audi	S6	ADX	48	4.0 8
		2013 Audi	Audi	S7	ADX	47	4.0 8
		2013 Audi	Audi	S8	ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe quattro	ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013 Audi	Audi	TTRS Coup	ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental	BEX	110	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX	108	4.0 8
		2013 Bentley	Bentley Motors	Continental	BEX	113	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX	131	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX C	107	4.0 8
		2013 Bentley	Bentley Motors	Continental	BEX C	111	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX C	130	6.0 12

	2013 Bentley	Bentley Motors Continental BEX	112	6.0	12
	2013 Bentley	Bentley Motors Mulsanne BEX	96	6.8	8
	2013 Bugatti	Bugatti Veyron BGT	88	8.0	16
	2013 Lamborghini	Lamborghini Aventador Coupe	92	6.5	12
	2013 Lamborghini	Lamborghini Aventador Roadster	93	6.5	12
	2013 Lamborghini	Lamborghini Gallardo Coupe	30	5.2	10
	2013 Lamborghini	Lamborghini Gallardo CNLX	32	5.2	10
	2013 Lamborghini	Lamborghini Gallardo Spyder	31	5.2	10
	2013 Lamborghini	Lamborghini Gallardo SNLX	33	5.2	10
	2013 Volkswagen	Volkswagen BEETLE VWX	19	2.0	4
Diesel;	2013 Volkswagen	Volkswagen BEETLE VWX	94	2.0	4
Diesel;	2013 Volkswagen	Volkswagen BEETLE VWX	84	2.0	4
	2013 Volkswagen	Volkswagen BEETLE VWX	89	2.0	4
	2013 Volkswagen	Volkswagen BEETLE VWX	17	2.5	5
	2013 Volkswagen	Volkswagen BEETLE VWX	27	2.5	5
	2013 Volkswagen	Volkswagen BEETLE CONVERTIBLE	20	2.0	4
Diesel;	2013 Volkswagen	Volkswagen BEETLE CONVERTIBLE	85	2.0	4
	2013 Volkswagen	Volkswagen BEETLE CONVERTIBLE	90	2.0	4
	2013 Volkswagen	Volkswagen BEETLE CONVERTIBLE	18	2.5	5
	2013 Volkswagen	Volkswagen CC VWX	1	2.0	4
	2013 Volkswagen	Volkswagen CC VWX	4	2.0	4
	2013 Volkswagen	Volkswagen CC VWX	2	3.6	6
	2013 Volkswagen	Volkswagen CC 4MOTION VWX	3	3.6	6
	2013 Volkswagen	Volkswagen EOS VWX	21	2.0	4
Diesel;	2013 Volkswagen	Volkswagen GOLF VWX	72	2.0	4
Diesel;	2013 Volkswagen	Volkswagen GOLF VWX	81	2.0	4
	2013 Volkswagen	Volkswagen GOLF VWX	16	2.5	5
	2013 Volkswagen	Volkswagen GOLF VWX	26	2.5	5
	2013 Volkswagen	Volkswagen Golf R VWX	57	2.0	4
	2013 Volkswagen	Volkswagen GTI VWX	22	2.0	4
	2013 Volkswagen	Volkswagen GTI VWX	23	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	50	2.0	4
Diesel;	2013 Volkswagen	Volkswagen Jetta VWX	71	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	86	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	87	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	51	2.0	4
Diesel;	2013 Volkswagen	Volkswagen Jetta VWX	80	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	15	2.5	5
	2013 Volkswagen	Volkswagen Jetta VWX	25	2.5	5
Hybrid;	2013 Volkswagen	Volkswagen Jetta Hybrid VWX	100	1.4	4
Diesel;	2013 Volkswagen	Volkswagen JETTA SPORT V6 VWX	74	2.0	4
Diesel;	2013 Volkswagen	Volkswagen JETTA SPORT V6 VWX	79	2.0	4
	2013 Volkswagen	Volkswagen JETTA SPORT V6 VWX	14	2.5	5
	2013 Volkswagen	Volkswagen JETTA SPORT V6 VWX	24	2.5	5
Diesel;	2013 Volkswagen	Volkswagen Passat VWX	62	2.0	4
Diesel;	2013 Volkswagen	Volkswagen Passat VWX	64	2.0	4
	2013 Volkswagen	Volkswagen Passat VWX	83	2.5	5
	2013 Volkswagen	Volkswagen Passat VWX	82	2.5	5
	2013 Volkswagen	Volkswagen Passat VWX	63	3.6	6
	2013 Volkswagen	Volkswagen Tiguan VWX	68	2.0	4
	2013 Volkswagen	Volkswagen Tiguan VWX	56	2.0	4
	2013 Volkswagen	Volkswagen Tiguan 4MOTION	55	2.0	4
Diesel;	2013 Volkswagen	Volkswagen Touareg VWX	54	3.0	6
	2013 Volkswagen	Volkswagen Touareg VWX	78	3.6	6
Hybrid;	2013 Volkswagen	Volkswagen Touareg Hybrid VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S6)	21	28	24				26.6	38.2	30.8102
Auto(AM-S6)	30	42	34				39.0935	59.3437	46.1856
Manual(M6)	21	30	24				25.3	40.3	30.3902
Auto(AM-S6)	21	28	24				27.2	37.1	30.9119
Auto(AV-S8)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	18	26	21				22.8446	35.5	27.2096
Auto(S8)	24	30	26				30.4	39.9	34.048
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(AM-S7)	16	23	18				19.1	30	22.8332
Auto(AM-S7)	16	22	18				19.2	28.9	22.6159
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	26	21				22.1	34.7	26.4165
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Manual(M6)	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	12	21	15				15.4	28.3	19.3741
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	12	20	15				14.4	26.7	18.1658



Auto(S6)	12	19	14	13.9	24.7	17.3049
Auto(S8)	11	18	13	12.9	21.8	15.8033
Auto(AM-S7)	8	15	10	10	17.9	12.4782
Auto(AM-S7)	11	18	13	12.6	25.2	16.2581
Auto(AM-S7)	10	16	12	11.5	21.2	14.4817
Auto(AM-S6)	13	20	16	16.1	25.4	19.276
Manual(M6)	12	20	15	14	24	17.2308
Auto(AM-S6)	13	20	16	16	25.4	19.197
Manual(M6)	12	20	14	13	22.6	16.0722
Auto(AM-S6)	22	30	25	26.5	42.0656	31.7942
Auto(AM-S6)	29	39	32	37.3	55.3	43.7011
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M5)	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S6)	21	29	24	26.8	40.2092	31.532
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S6)	22	31	25	26.977	42.4936	32.2814
Manual(M6)	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S6)	22	30	25	27.5	41.5	32.4219
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Manual(M6)	19	27	22	23.9	37.1	28.456
Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229
Manual(M6)	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M5)	24	34	28	28.8	46.2	34.6771
Manual(M6)	22	33	26	26.5556	44.9945	32.56
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S7)	41	46	43	55.4	65.2	59.419
Auto(AM-S6)	29	39	33	37.6	56.2	44.1798
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	30	40	34	37.9	56.8	44.5744
Manual(M6)	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M5)	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S6)	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	Engine Fuel	Unrd Comb Unr	Guzzler?	Air Aspir IAir AspiraTrans	Trans DesTrans, Otr# Gears
21.3388	27.7919	23.8286		TC TurbochargedAMS	Automated Manual-Selectable(e.g. Au
29.8946	41.5209	34.2046		TC TurbochargedAMS	Automated Manual-Selectable(e.g. Au
20.8146	29.9953	24.1394		TC TurbochargedM	Manual 6
20.891	28.1035	23.6187		TC TurbochargedAMS	Automated Manual-Selectable(e.g. Au
23.6355	30.6684	26.3554		TC TurbochargedV	Selectable Continuously Variable(e.g. C
20.3576	29.8271	23.7508		TC TurbochargedS	Semi-Automatic 8
20.402	28.949	23.5279		TC TurbochargedS	Semi-Automatic 8
22.2425	32.0861	25.8049		TC TurbochargedM	Manual 6
23.6355	30.6684	26.3554		TC TurbochargedV	Selectable Continuously Variable(e.g. C
20.3576	29.8271	23.7508		TC TurbochargedS	Semi-Automatic 8
20.402	28.949	23.5279		TC TurbochargedS	Semi-Automatic 8
20.3576	29.8271	23.7508		TC TurbochargedS	Semi-Automatic 8
20.402	28.949	23.5279		TC TurbochargedS	Semi-Automatic 8
22.2425	32.0861	25.8049		TC TurbochargedM	Manual 6
24.5044	32.5529	27.5721		TC TurbochargedV	Selectable Continuously Variable(e.g. C
20.3576	29.8271	23.7508		TC TurbochargedS	Semi-Automatic 8
18.3949	27.2332	21.5408		SC SuperchargedS	Semi-Automatic 8
17.8058	27.5484	21.1758		SC SuperchargedS	Semi-Automatic 8
8(474058)	27.1484	21.1758	Release date 5C the effective date when vehicle is introduced;	SC SuperchargedS	Semi-Automatic 8
17.2616	28.4347	20.9695		TC TurbochargedS	Semi-Automatic 8
8(474058)	27.1484	21.1758	Release date 5C the effective date when vehicle is introduced;	SC SuperchargedS	Semi-Automatic 8
16.0273	25.8053	19.3219		TC TurbochargedS	Semi-Automatic 8
13.1387	20.6025	15.6978	G	NA Naturally Aspirated	Semi-Automatic 8
19.9584	26.6824	22.5112		TC TurbochargedS	Semi-Automatic 8
19.9584	26.6824	22.5112		TC TurbochargedS	Semi-Automatic 8
19.7289	28.2351	22.823		TC TurbochargedS	Semi-Automatic 8
19.6619	27.5771	22.5781		TC TurbochargedS	Semi-Automatic 8
17.8443	25.5746	20.6536		SC SupercharSA	Semi-Auto 8
24.0075	29.7936	26.3065		TC TurbochargedS	Semi-Automatic 8
18.74	27.62	21.9099		TC TurbochargedS	Semi-Automatic 8
15.522	21.5458	17.7559		SC SuperchargedS	Semi-Automatic 8
15.7409	23.3075	18.4339		NA Naturally AMS	Automated Manual-Selectable7(e.g. Au
15.8793	22.1836	18.2078		NA Naturally AMS	Automated Manual-Selectable7(e.g. Au
18.117	27.558	21.419		SC SuperchargedAMS	Automated Manual-Selectable7(e.g. Au
17.0438	26.023	20.1767		SC SuperchargedM	Manual 6
18.117	27.558	21.419		SC SuperchargedAMS	Automated Manual-Selectable7(e.g. Au
17.0438	26.023	20.1767		SC SuperchargedS	Manual 6
17.6699	25.953	20.6333		SC SuperchargedAMS	Automated Manual-Selectable7(e.g. Au
16.761	26.9697	20.2022		TC TurbochargedAMS	Automated Manual-Selectable7(e.g. Au
16.761	26.9697	20.2022		TC TurbochargedAMS	Automated Manual-Selectable7(e.g. Au
15.2801	25.5632	18.6574		TC TurbochargedS	Semi-Automatic 8
22.407	31.1674	25.6515		TC TurbochargedAMS	Automated Manual-Selectable(e.g. Au
22.407	31.1674	25.6515		TC TurbocharAMS	Automatec 6
17.751	25.2021	20.4751		TC TurbocharM	Manual 6
11.2476	18.7327	13.7134	G	TC TurbocharSA	Semi-Auto 6
15.0109	24.4645	18.1706		TC TurbocharSA	Semi-Auto 8
11.5043	18.877	13.9574	G	TC TurbochargedS	Semi-Automatic 6
12.4737	21.0866	15.2827	G	TC TurbochargedS	Semi-Automatic 8
14.0639	23.9773	17.2766	G	TC TurbochargedS	Semi-Automatic 8
11.2476	18.7327	13.7134	G	TC TurbochargedS	Semi-Automatic 6
12.0226	20.0478	14.6643	G	TC TurbochargedS	Semi-Automatic 8

11.5043	18.877	13.9574	G	TC	Turbocharged	Semi-Automatic	6
10.5402	17.7129	12.8889	G	TC	Turbocharged	Semi-Automatic	8
8.4232	14.7698	10.4424	G	TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
10.6055	18.4729	13.1199	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
9.7957	16.2453	11.9264	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
13.4655	19.7573	15.718	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
12.0883	19.9831	14.7021	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
13.3954	19.7741	15.6701	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
11.5388	19.5451	14.1465	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
22.0202	29.5574	24.8746		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
28.6469	38.87	32.4925		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
20.5408	29.7034	23.8517		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
22.2864	28.5683	24.7338		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.7201	30.6767	25.0054		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.1383	28.6751	23.9738		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
20.5408	29.7034	23.8517		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
21.2302	26.9749	23.4804		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.8706	31.0367	25.2227		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
20.8232	31.7255	24.6324		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
17.4935	26.5716	20.6716		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
16.9415	25.219	19.8774		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.7634	30.1121	24.8658		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.6446	31.0458	26.486		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
22.7343	32.7402	26.3594		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
19.278	26.8882	22.0917		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
24.2237	32.5108	27.3624		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
21.2839	30.8324	24.7304		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.7854	31.6043	26.7652		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.1009	29.1554	25.4822		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
24.3944	33.6309	27.8344		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.8931	32.6043	25.6912		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.6446	31.0458	26.486		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
22.7343	32.7402	26.3594		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
40.7039	45.7221	42.8187		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
28.8556	39.4682	32.8278		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.6446	31.0458	26.486		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
22.7343	32.7402	26.3594		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
30.4633	40.2057	34.1916		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
30.8024	42.6219	35.1943		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
22.1078	30.6611	25.2814		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.8993	32.1378	25.5642		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
19.7174	27.8048	22.6868		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
20.6233	26.0617	22.7606		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
18.1488	26.2617	21.0791		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
20.402	25.8545	22.5412		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
19.649	28.9961	22.9829		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
17.0411	22.7325	19.2048		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
19.8843	23.7762	21.4655		SC	Supercharged	AMS	Automated Manual- Selectable (e.g. Au

Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Yomated M	N	Manual with	paddles) 2-Wheel D	DAEXV02.03PA	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) 2-Wheel D	DAEXV02.00U5N		5		DU	Diesel, ultra low s
N	N	F	2-Wheel D	DAEXV02.03PA	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	DAEXV02.03UA	10			GP	Gasoline (Premium
MT with padd	N	F	2-Wheel D	DAEXV02.03UB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV02.03UB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXJ02.0FUB	85	406		GP	Gasoline (Premium
N	N	A	All Wheel	DAEXV02.03UB	10			GP	Gasoline (Premium
MT with padd	N	F	2-Wheel D	DAEXV02.03UB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV02.03UB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXJ02.0FUB	85	406		GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV02.03UB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXJ02.0FUB	85	406		GP	Gasoline (Premium
N	N	A	All Wheel	DAEXV02.03UB	10			GP	Gasoline (Premium
MT with padd	N	F	2-Wheel D	DAEXV02.03UB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV02.03UB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXJ03.03UF	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXJ03.03UF	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXJ03.03UF	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV04.03UJ	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXJ03.03UF	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV04.03UJ	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV06.3UA8	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXJ02.0FUB	85	389		GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV02.03UB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXT02.04UB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXJ02.0FUB	85	447		GP	Gasoline (Premium
Y	N	A	All Wheel	IDADXJ03.!	10			GP	Gasoline (I
Y	N	A	All Wheel	DAEXT02.0HUB	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXT03.03UG		5		DU	Diesel, ultra low s
Y	N	A	All Wheel	DAEXT03.0TLF	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	DAEXV04.23UL	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	DAEXV04.23UL	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	DAEXJ03.03UF	10			GP	Gasoline (Premium
N	N	A	All Wheel	DAEXJ03.03UF	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	DAEXJ03.03UF	10			GP	Gasoline (Premium
N	N	A	All Wheel	DAEXJ03.03UF	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	DAEXJ03.03UF	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	DAEXV04.03UJ	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	DAEXV04.03UJ	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV04.03UJ	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	DAEXV02.03UA	10			GP	Gasoline (Premium
Yomated M	N	Manual with	paddles) All Wheel	IDADXV02.!	10			GP	Gasoline (F
N	N	A	All Wheel	IDADXV02.!	10			GP	Gasoline (F
Y	N	A	All Wheel	IDBEXV06.C	85	333		GP	Gasoline (F
Y	N	A	All Wheel	IDADXV04.!	10			GP	Gasoline (F
Y	N	A	All Wheel	DBEXV06.0501	85	333		GP	Gasoline (Premium
Y	N	A	All Wheel	DBEXV06.04UC	85	364		GP	Gasoline (Premium
Y	N	A	All Wheel	DAEXV04.03UJ	10			GP	Gasoline (Premium
Y	N	A	All Wheel	DBEXV06.0501	85	333		GP	Gasoline (Premium
Y	N	A	All Wheel	DBEXV06.04UC	85	357		GP	Gasoline (Premium

Y	N	A	All Wheel Drive	DV06.0501	85	333	GP	Gasoline (Premium
Y	N	R	2-Wheel Drive	DV06.84LA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		All Wheel Drive	DV08.0V16	10		GPR	Gasoline (Premium
Y	Manual with Paddles)		All Wheel Drive	DV06.5L83	10		GPR	Gasoline (Premium
Y	Manual with Paddles)		All Wheel Drive	DV06.5L83	10		GPR	Gasoline (Premium
Y	Manual with Paddles)		All Wheel Drive	DV05.2LR8	10		GP	Gasoline (Premium
N	N	A	All Wheel Drive	DV05.	10		GP	Gasoline (I
Y	Manual with Paddles)		All Wheel Drive	DV05.2LR8	10		GP	Gasoline (Premium
N	N	A	All Wheel Drive	DV05.	10		GP	Gasoline (I
Y	Manual with Paddles)		2-Wheel Drive	DVWXJ02.0	10		GP	Gasoline (F
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVWXV03.6U46	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DVXV03.6U46	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.03SA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
N	N	A	All Wheel Drive	DVXV02.03UA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVXV02.03UA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.0U36	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.0U36	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV01.4PHE	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U4S		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.0U4S		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV03.6U41	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DVWXJ02.03UA	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DVXT03.02UG		5	DU	Diesel, ultra low s
Y	N	A	All Wheel Drive	DVXT03.6U76	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DVXT03.0HEV	10		GP	Gasoline (Premium

Product Name	Gas Guzz	Gas Guzz	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MRCeaded Release (regulatio	Not exempt		89	20				
MRCeaded Release (regulatio	Not exempt		89	20				
MRCeaded Release (regulatio	Not exempt		89	20				
MRCeaded Release (regulatio	Not exempt				89	20		
MRCeaded Release (regulatio	Not exempt				91	12		
MRCeaded Release (regulatio	Not exempt				91	12		
MRCeaded Release (regulatio	Not exempt				91	12		
MRCeaded Release (regulatio	Not exempt				91	12		
MRCeaded Release (regulatio	Not exempt		81	10				
MRCeaded Release (regulatio	Not exempt		81	10				
MRCeaded Release (regulatio	Not exempt		81	10				
MRCeaded Release (regulatio	Not exempt		84	12				
MRCeaded Release (regulatio	Not exempt		84	12				
MRCeaded Release (regulatio	Not exempt		84	12				
MRCeaded Release (regulatio	Not exempt				98	16		
MRCeaded Release (regulatio	Not exempt				98	16		
MRCeaded Release (regulatio	Not exempt				98	16		
MRCeaded Release (regulatio	Not exempt						94	25
MRCeaded Release (regulatio	Not exempt				100	15		
MRCeaded Release (regulatio	Not exempt				100	15		
MRCeaded Release (regulatio	Not exempt				107	15		
MRCeaded Release (regulatio	Not exempt				107	15		
MRCeaded Release (regulatio	Not exempt				107	15		
MRCeaded Release (regulatio	Not exempt				90	28		
MRCeaded Release (regulatio	Not exempt				90	28		
MRCeaded Release (regulatio	Truck							
MRCeaded Release (regulatio	Truck							
MRCeaded Release (regulatio	Truck							
MRCeaded Release (regulatio	Truck							
MRCeaded Release (regulatio	Not exempt		84	13				
MRCeaded Release (regulatio	Not exempt		81	10				
MRCeaded Release (regulatio	Not exempt				90	13		
MRCeaded Release (regulatio	Not exempt				90	13		
MRCeaded Release (regulatio	Not exempt		84	13				
MRCeaded Release (regulatio	Not exempt		84	13				
MRCeaded Release (regulatio	Not exempt		81	10				
MRCeaded Release (regulatio	Not exempt				98	16		
MRCeaded Release (regulatio	Not exempt						94	25
MRCeaded Release (regulatio	Not exempt				100	15		
MRCeaded Release (regulatio	Not exempt		74	13				
MRCeaded Release (regulatio	Not exempt							
MRCeaded Release (regulatio	Not exempt						74	13
MRCeaded Release (regulatio	Not exempt		102	13				
MRCeaded Release (regulatio	Not exempt		89	11				
MRCeaded Release (regulatio	Not exempt		89	11				
MRCeaded Release (regulatio	Not exempt		89	11				
MRCeaded Release (regulatio	Not exempt		86	7				
MRCeaded Release (regulatio	Not exempt		86	7				
MRCeaded Release (regulatio	Not exempt		86	7				

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Annual Fuel Economy	EPA Calculation	Comment	City2 FE (mi/gal)	Hwy2 FE (mi/gal)	Comb2 FE (mi/gal)	Low'd City (mi/gal)	Low'd Hwy (mi/gal)	Low'd Comb (mi/gal)	City2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C							
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre							
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values							
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v							
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unrnd							
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG valuwe and							
2400	2400	corrected unadj unrnd highway CO2 and then the reounded number is correct. 8558							
2200	2200								
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th							
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and							
2400	2400	corrected unadj unrnd highway CO2 and then the reounded number is correct. 8558							
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and							
2400	2400	corrected unadj unrnd highway CO2 and then the reounded number is correct. 8558							
2200	2200								
2050	2050	corrected forward speeds to 8, for this CVT trans							
2400	2400	corrected gas guzzler MPG valuwe and gallons per 100 value...these values were switched							
2600	2600								
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes							
2700	2700	600.314-08(e)(4); the label was recalulated after completion of EPA confirmatory testing and							
2700	2700	S/S set to yes							
2700	2700	the label was recalulated after completion of EPA confirmatory testing and then added new A							
3000	3000	S/S set to yes							
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con							
2500	2500		14	18	15				17.1
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c							
2500	2500	corrected unadj unrounded highway and conbined values							
2500	2500		14	19	16				17.4
2700	2700								
2200	2200								
2600	2600	CO2 corrections, additonal fuel costs in saving field, corrected Aug 14th							
3150	3150	CO2 corrections, again Aug 14th, Aug 23 CO2 rounding....adjusted whole CO2 from unadjuste							
3150	3150	CO2 corrections							
3150	3150	corrected city CO2 value, typo							
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una							
2700	2700	corrected city unadj unrounded CO2 , Aug 14th							
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una							
2700	2700	corrected unadj and adj CO2 values, Aug 14th							
2850	2850	CO2 corrections							
2850	2850	CO2 corrections							
3000	3000								
2200	2200	CO2 corrections, Aug 14th correction							
2200	2200	CO2 corrections, Aug 14th							
2850	2850								
4050	4050	corrected i8	13	10					9.5
3150	3150								
4050	4050	correct adj unrounded and rounded comb CO2 values Aug 14th							10.3
3800	3800	corrected highway unadj value							10.5
3350	3350								
4050	4050	corrected Comb adj unrnd CO2	10						9.5
3800	3800	corrected axle ratio	15	11					10.5



4050 4050 CO2 rounding correction on Aug 23rd 10.3  
4400 4400  
5700 5700 corrected lock out to "yes" and AMS.  
4400 4400 lock up to YES., CO2 corrections Aug 14, S/S set to yes, CO2 rounding correction Aug 23rd  
4750 4750 adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes  
3550 3550 corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th  
3800 3800 CO2 rounding correction Aug 23rd  
3550 3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure  
4050 4050 CO2 rounding Aug 23rd then again on Aug 27  
2300 2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED  
1800 1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value  
1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
2400 2400 corrected CO2 values, corrected fuel cost over 5 years  
2150 2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g  
2150 2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u  
2400 2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t  
1800 1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c  
2400 2400 CO2 corrections, fuel spending corrected to \$400  
2300 2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust  
2300 2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a  
2300 2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre  
2700 2700 update after Verify release 10  
2850 2850 UPDATE after Verify release 10  
2300 2300 CO2 corrections  
1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co  
2050 2050 early label, update after Verify release 10, CO2 corrections  
2050 2050 update after Verify release 10 issued, CO2 comb correction  
2600 2600 CO2 corrections, CO2 rounding corrections Aug 20th  
2100 2100 CO2 corrections  
2300 2300 early label, update after Verify release 10  
2100 2100 corrected unadjusted unrounded CO2 highway and combined values and combined adjusted w  
1700 1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre  
2150 2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6  
1900 1900 FE and GHG ratings corrected to 7  
2200 2200 CO2 corrections  
1700 1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co  
2050 2050 early label, update after Verify release 10, CO2 corrections  
2050 2050 update after Verify release 10 issued, CO2 corrections  
1350 1350 GHG rating corrected to 10, recalc with EPA confirmatory tests  
1750 1750 CO2 corrections; inhouse derived 5-cycle formula corrected Aug 15th  
1700 1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th, CO2 rounding corrections A  
2050 2050 early label, update after Verify release 10, CO2 corrections  
2050 2050 update after Verify release 10 issued, CO2 corrections  
1700 1700  
1650 1650  
2150 2150 CO2 corrections  
2050 2050 CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections  
2500 2500 CO2 correction  
2500 2500 corrected CO2 values, CO2 rounding corrections Aug 20th, rounding Aug 23rd  
2700 2700 CO2 corrections, CO2 rounding corrections Aug 20th  
2500 2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections, CO2 rounding c  
2500 2500 CO2 corrections  
3000 3000 CO2 correction Aug 15th, CO2 rounding corrections Aug 20th  
2700 2700 CO2 corrections

Hwy2 Unadj Comb2 Unadj City2 Unadj Hwy2 Unadj Comb2 Unadj Range2 - Fuel2 Use Fuel2 Use Fuel2 Unit Fuel2 Unit

O2  
 ction Aug 20th

alue

ded CO2 value again, second time Aug 14th

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per gallon
---------	---------	---------	---------	--------	-----	---	---------------	-----	------------------

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per gallon
---------	---------	---------	---------	--------	-----	---	---------------	-----	------------------

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per gallon
---------	---------	---------	---------	--------	-----	---	---------------	-----	------------------

then added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to yes

7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to yes

sumption to 6.2 per ASTM rounding procedure

25.6	20.1038	13.5432	18.3117	15.3409	253	E	Ethanol (E85)	MPG	miles per gallon
------	---------	---------	---------	---------	-----	---	---------------	-----	------------------

ity and highway CO2 values

27.1	20.7407	13.7947	19.3602	15.8444	314	E	Ethanol (E85)	MPG	miles per gallon
------	---------	---------	---------	---------	-----	---	---------------	-----	------------------

d weighted values not CO2 to tenths value that is imputted into Verify.

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)	MPG	miles per g
------	---------	--------	---------	--------	-----	---	---------------	-----	-------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)	MPG	miles per gallon
------	--------	--------	---------	---------	-----	---	---------------	-----	------------------

20.8	13.5107	8.8115	15.1054	10.8449	262	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	---------	-----	---	---------------	-----	------------------

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	--------	-----	---	---------------	-----	------------------

20.5	13.4531	8.6127	14.7094	10.5874	262	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	---------	-----	---	---------------	-----	------------------

17.2      12.569      8.3016      13.5384      10.0512      238      E      Ethanol (E85)      miles per gallon

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

roup, CO2 rounding Aug 23rd  
nrounded highway and combined CO2 values  
o 29 MPG

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

ed MPG value  
nd corresponding 5-cycle values  
cted calculated values

ction Aug 20th  
rrections Aug 20th

hole CO2 value  
ction Aug 20th

rrections Aug 20th

ug 20th

orrections Aug 20th, CO2 rounding Aug 23rd



4650	794	469	648	4650	FFV;	2	23	Subcompact Cars
						1	15	Midsize Cars
						2	21	Two Seaters
						2	21	Two Seaters
						2	21	Two Seaters
					SIDI;	2	21	Two Seaters
					SIDI;	2	21	Two Seate
					SIDI;	2	21	Two Seaters
					SIDI;	2	21	Two Seate
					SIDI;	2	24	Compact C
						2	24	Compact C
						2	24	Compact Cars
					SIDI;	2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
					SIDI;	2	23	Subcompact Cars
						2	23	Subcompact Cars
					SIDI;	2	23	Subcompact Cars
						2	23	Subcompact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	23	Subcompact Cars
						2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
						2	24	Compact Cars
						1	14	Compact Cars
						1	14	Compact Cars
					SIDI;	2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
					SIDI;	2	24	Compact Cars
						2	27	Small Station Wag
						2	27	Small Station Wag
						2	27	Small Station Wag
						2	27	Small Station Wag
						2	25	Midsize Cars
						2	25	Midsize Cars
						2	25	Midsize Cars
						2	25	Midsize Cars
					SIDI;	2	25	Midsize Cars
					SIDI;	2	230	Small SUV 2WD
					SIDI;	2	230	Small SUV 2WD
					SIDI;	2	231	Small SUV 4WD
						2	233	Standard SUV 4W
					SIDI;	2	233	Standard SUV 4W
					SIDI;	2	233	Standard SUV 4W

Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
cars	Derived 5-cycle label	6/22/2012	12265	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12092	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Derived 5-cycle label	8/28/2012	12549	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12093	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Derived 5-cycle label	8/28/2012	12551	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Derived 5-cycle label	8/28/2012	12550	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/21/2012	12228	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	12604	N	N	
car	Vehicle Specific 5-cycle	8/15/2012	12227	N	N	
car	Vehicle Specific 5-cycle	8/15/2012	12625	N	N	
car	Vehicle Specific 5-cycle	8/15/2012	12226	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
cars	Derived 5-cycle label	8/27/2012	12479	N	N	
cars	Derived 5-cycle label	4/26/2012	11490	N	N	
	Vehicle Specific 5-cycle	7/13/2012	11319	N	N	
	Derived 5-cycle label	9/10/2012	12595	N	N	
	Vehicle Specific 5-cycle	9/24/2012	12655	N	N	
	Vehicle Specific 5-cycle	9/28/2012	12158	N	N	
D	Vehicle Specific 5-cycle	7/16/2012	12105	N	N	
D	Derived 5-cycle label	6/11/2012	12437	N	N	
car	Vehicle Specific 5-cycle	4/8/2012	11510	N	N	
car	Vehicle Specific 5-cycle	2/13/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12106	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12108	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12111	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	8/27/2012	12122	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12115	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12113	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12116	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12119	N	N	
car	Vehicle Specific 5-cycle	9/28/2012	12686	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12117	N	N	
car	Vehicle Specific 5-cycle	9/28/2012	12640	N	N	

car	Vehicle Specific 5-cycle	3/30/2012	12440		N	N
car	Vehicle Specific 5-cycle	3/30/2012	12211		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11087		N	N
car	Vehicle Specific 5-cycle	3/17/2012	12441		N	N
car	Vehicle Specific 5-cycle	1/14/2013	12234		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12128		N	N
car	Vehicle Specific 5-cycle	6/20/2012	12442		N	N
car	Vehicle Specific 5-cycle	6/21/2012	12130		N	N
car	Vehicle Specific 5-cycle	6/20/2012	12466		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187		N	N
car	Derived 5-cycle label	7/19/2012	12135		N	N
car	Derived 5-cycle label	6/25/2012	12272		N	N
car	Vehicle Specific 5-cycle	7/12/2012	12271		N	N
car	Vehicle Specific 5-cycle	7/30/2012	12435		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373		N	N
car	Derived 5-cycle label	7/30/2012	10277		N	N
car	Derived 5-cycle label	6/25/2012	12273		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287		N	N
car	Vehicle Specific 5-cycle	1/16/2012	10186		N	N
car	Vehicle Specific 5-cycle	1/25/2012	11044		N	N
car	Vehicle Specific 5-cycle	1/16/2012	10532		N	N
car	Vehicle Specific 5-cycle	1/16/2012	10534		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527		N	N
car	Derived 5-cycle label	6/22/2012	12264		N	N
car	Derived 5-cycle label	6/25/2012	12268		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12277		N	N
car	Vehicle Specific 5-cycle	1/16/2012	11531		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531		N	N
car	Vehicle Specific 5-cycle	1/18/2012	11372		N	N
car	Derived 5-cycle label	6/22/2012	12263		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300		N	N
car	Vehicle Specific 5-cycle	1/16/2012	11532		N	N
car	Derived 5-cycle label	6/25/2012	12267		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535		N	N
car	Derived Vehicle Specific 5-cycle	11/19/2012	12658	Calculation Approach for city label but Modified 5-cycle Calculation Appr	N	N
cars	Derived 5-cycle label	6/25/2012	12151		N	N
cars	Derived 5-cycle label	6/25/2012	12266		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11534		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11536		N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11539		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11547		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554		N	N
	Derived 5-cycle label	6/18/2012	12432		N	N
	Vehicle Specific 5-cycle	6/11/2012	12276		N	N
	Derived 5-cycle label	6/11/2012	12431		N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563		N	N
D	Derived 5-cycle label	6/25/2012	12278		N	N
D	Derived 5-cycle label	6/25/2012	11559		N	N

Suppressor	Police/Em	Comment	Cyl Deact	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Energy St
N	N	Test Group	Qualifies as PZEV.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N		N	N		N			
N	N	Test Group	Qualifies as PZEV.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N	ENGINE CODE	CDMA ONLY.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	Intake and	Exhaust	cam	timing is electronically con	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine code	CPMA	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	N					
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	Continuously	intake and	exhaust	cam adjustment	
N	N		N	Y	Continuously	intake and	exhaust	cam adjustment	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	ENGINE CODE	CDMA ONLY.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N	ENGINE CCN		Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N	Continent	N	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M	
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y	Multi-lobe	
N	N	Continental	N	Flying Spur	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M
N	N		N	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M	
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Continental	N	Flying Spur	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M
N	N		N	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M	



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Device Des#	Battery	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit
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These observations are for the purpose of the test only and are not to be used for any other purpose.

These observations are for the purpose of the test only and are not to be used for any other purpose. The test results are for the purpose of the test only and are not to be used for any other purpose.

1 Lithium Ion

266

5

37 On-Board

These observations are for the purpose of the test only and are not to be used for any other purpose.

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STMENT

MECHANICAL-HYDRAULIC

These observations are for the purpose of the test only and are not to be used for any other purpose.

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

These observations are for the purpose of the test only and are not to be used for any other purpose.

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC  
adjust valves on a single camshaft. No change in valve overlaps.  
MECHANICAL-HYDRAULIC  
ON CONTINUOUSLY VVT  
ON CONTINUOUSLY VVT  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
controlled and hydraulically adjusted

controlled and hydraulically adjusted  
HYDRAULIC  
HYDRAULIC  
controlled and hydraulically adjusted

controlled and hydraulically adjusted  
HYDRAULIC  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
y controlled and hydraulically adjusted  
y controlled and hydraulically adjusted

HYDRAULIC  
HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

HYDRAULIC  
HYDRAULIC  
ND OUTLET CAMS 1 Lithium Ion 220 5 27 On-Board

HYDRAULIC  
HYDRAULIC

HYDRAULIC  
HYDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

LICALLY AND CONTROLLED ELECTRONICALLY  
AMS 1 NiMH 288 6 21.5 On-Board

ed (2) have occurred at this port, EGT greater than 400°C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

and 2) lined at gear at the bottom of the cylinder, head speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical Regen Brake	Both	Y
------------------------	------	---

## 1AC Induction

ed (2) have 3rd gear at this point, FGT gear after the 4th gear, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

ed (2) have 3rd gear at this point, EGTs after the 400°C mark, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

ed (2) have not occurred at this port, EGT greater than 400°C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

ed (2) have 3 stages at this point, EGT greater than 400°C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

ed (2) have occurred at this port, EGT greater than 400°C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical BRAKE PEDAL TRIGGERED REGENERATIVE  
Regen Brake Hold Mode

1Other

Other BRAKE PEDAL TRIGGERED REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM 1Other

40

### 3 PHASE PERMANENT MAGNET

### 3 PHASE CURRENT PERM. MAGNET

MFI	Multipoint/sequential fuel inject	N	5W30 VW 504 00
MFI	Multipoint/sequential fuel inject	N	0W40 / VW50200
MFI	Multipoint/sequential fuel inject	N	10W60 VW 50101
MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
GDI	Spark Ignit	N	10W60 VW
GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
GDI	Spark Ignit	N	10W60 VW
GDI	Spark Ignit	N	5W40 VW
CRDI	Common FN	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignition Direct Injection	N	5W40 / VW50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignit	N	5W40
GDI	Spark Ignit	N	5W40
GDI	Spark Ignit	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignit	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
CRDI	Common Rail Direct Diesel Inject	N	5W40 VW 50501
CRDI	Common Rail Direct Diesel Inject	N	5W40 VW 50501
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W30 VW 50700
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignit	N	5W40 VW 50200

Stop/Start Stop/Start Trans in FE Trans as I Model Typ Charge De Charge De Charge Su Charge Su EPA Calcul

N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6) 3 frt manual
N	No	Auto(AM-S6)	Auto(AM-S6) 3 quattro
N	No	Auto(AV-S8)	Auto(AV-S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8) Audi A6 CVT
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi A6 quattro
Y	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi Q7
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe c
N	No	Manual(M6)	Manual(M6) TTRS
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)



N	No	Auto(S6) Auto(S6)
<del>N</del> W50500	No	Auto(S8) Auto(S8)
<del>N</del> 50500	No	Auto(AM-S7) Auto(AM-S7)
<del>Y</del> 0700	Yes	Auto(AM-S7) Auto(AM-S7)
<del>Y</del> 0700	Yes	Auto(AM-S7) Auto(AM-S7)
<del>N</del> 50500	No	Auto(AM-S6) Auto(AM-S6)
<del>N</del> 50500	No	Manual(M6) Manual(M6) Gallardo C
<del>N</del> 50500	No	Auto(AM-S6) Auto(AM-S6)
<del>N</del> 50500	No	Manual(M6) Manual(M6) Gallardo S
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
<del>N</del>	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) C M6
N	No	Auto(S6) Auto(S6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S7) Auto(AM-S7)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Tiguan front
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Touareg Hybrid

Product	Model	Year	EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
		30.8		6	6 DAD XV02.03PA	7		
		46.2		9	8 DVW XV02.0U5N	5		
		30.4		6	6 DAD XV02.03PA	7		
		30.9		6	6 DAD XV02.03UA	5		
		35.2		7	7 DAD XV02.03UB	5		
		30.8		6	6 DAD XV02.03UB	5		
		30.9		6	6 DAD XJ02.0FUB	5		
		33.2		7	7 DAD XV02.03UB	5		
		35.2		7	7 DAD XV02.03UB	5		
		30.8		6	6 DAD XV02.03UB	5		
		30.9		6	6 DAD XJ02.0FUB	5		
		30.8		6	6 DAD XV02.03UB	5		
		30.9		6	6 DAD XJ02.0FUB	5		
		33.2		7	7 DAD XV02.03UB	5		
		36.9		7	7 DAD XV02.03UB	5		
		30.8		6	6 DAD XV02.03UB	5		
		28.1		5	5 DAD XJ03.03UF	5		
		27.5		5	5 DAD XJ03.03UF	5		
		27.5		5	5 DAD XJ03.03UF	5		
		27.1		5	5 DAD XV04.03UJ	5		
		27.5		5	5 DAD XJ03.03UF	5		
		24.4		4	4 DAD XV04.03UJ	5		
		19.3		3	3 DVW XV06.3UA8	5		
		29.5		6	6 DAD XJ02.0FUB	5		
		29.5		6	6 DAD XV02.03UB	5		
		28.8		6	6 DAD XT02.04UB	5		
		29.6		6	6 DAD XJ02.0FUB	5		
		27.2		5	5 DAD XJ03.03UF	5		
		34		7	7 DAD XT02.0HUB	5		
		28.1		5	4 DAD XT03.03UG	5		
		22.9		4	4 DAD XT03.0TLF	5		
		23		4	4 DAD XV04.23UL	5		
		22.6		4	4 DAD XV04.23UL	5		
		26.9		5	5 DAD XJ03.03UF	5		
		23.5		5	5 DAD XJ03.03UF	5		
		26.9		5	5 DAD XJ03.03UF	5		
		23.5		5	5 DAD XJ03.03UF	5		
		26.4		5	5 DAD XJ03.03UF	5		
		25.5		5	5 DAD XV04.03UJ	5		
		25.5		5	5 DAD XV04.03UJ	5		
		23.6		4	4 DAD XV04.03UJ	5		
		33.3		7	7 DAD XV02.03UA	5		
		33.3		7	7 DAD XV02.03UA	5		
		25.6		5	5 DAD XV02.03UA	5		
		17.2		2	2 DBEXV06.0501	5		
		23.6		4	4 DAD XV04.03UJ	5		
		17.4		2	2 DBEXV06.0501	5		
		19.4		3	3 DBEXV06.04UC	5		
		21.8		4	4 DAD XV04.03UJ	5		
		17.2		2	2 DBEXV06.0501	5		
		18.2		3	3 DBEXV06.04UC	5		

17.4		2	2 DBEXV06.0501	5
15.9		2	2 DBEXV06.84LA	5
12.6		1	1 DBGTV08.0V16	5
16.4		2	2 DNLXV06.5L83	5
14.5		1	1 DNLXV06.5L83	5
19.4		3	3 DADXV05.2LR8	5
17.4		3	3 DADXV05.	5
19.3		3	3 DADXV05.2LR8	5
16.1		2	2 DADXV05.	5
31.8		6	6 DVWXV02.	7
43.7		8	7 DVWXV02.	5
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
31.6		6	6 DVWXV02.5A59	7
31.9		6	6 DVWXV02.5M59	7
31.5		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
30.3		6	6 DVWXV02.5A59	7
32.3		6	6 DVWXV02.03PA	7
31.8		6	6 DVWXV02.03PA	7
25.8		5	5 DVWXV03.6U46	5
24.8		5	5 DVWXV03.6U46	5
32.4		6	6 DVWXV02.03SA	5
46.2		9	8 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
28.5		5	5 DADXV02.03UA	5
34.8		7	7 DADXV02.03PA	7
31.2		6	6 DADXV02.03PA	7
35		7	7 DVWXV02.03PA	7
46.2		9	8 DVWXV02.0U5N	5
32.9		6	6 DVWXV02.0U36	5
34.7		7	7 DVWXV02.0U36	5
32.6		7	7 DVWXV02.03PA	7
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
59.4		10	10 DVWXV01.4PHE	7
44.2		8	7 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
44.6		9	8 DVWXV02.0U4S	5
46.4		9	8 DVWXV02.0U4S	5
31.9		6	6 DVWXV02.5A59	7
31.7		7	7 DVWXV02.5M59	7
28.5		6	6 DVWXV03.6U41	5
29.9		6	6 DVWXJ02.03UA	5
26.4		5	5 DVWXJ02.03UA	5
29.6		6	6 DVWXJ02.03UA	5
23.3		6	5 DADXT03.02UG	5
25		4	4 DVWXT03.6U76	5
28.2		5	5 DVWXT03.0HEV	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DADXV02.03UA 5

DADXV02.03UA 5

DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

DVWXV02.5U3A 5

DVWXV02.5U3M 5

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	8650	768	469	633
	10400	840	501	688
	16900	1050	599	847
	10400	836	481	676
	12150	902	547	742
	6150	657	447	562
	7400	734	511	634
	6150	660	446	564
	8650	768	452	626
100		401	291	351
2600		354	262	313
2600		365	250	313
	400	430	298	371
850		396	310	358
850		408	289	354
	400	421	310	371
2600		365	250	313
	400	430	298	371
100		418	329	378
100		403	283	349
100		425	279	360
	1900	507	334	429
	2650	523	351	446
100		405	257	338
3100		340	245	297
3100		342	243	297
1350		374	286	334
1350		388	271	335
	1400	460	330	401
1100		379	271	331
100		416	287	358
1100		372	280	331
3100		340	245	297
850		381	299	344
2100		361	262	316
600		403	272	344
3100		342	243	297
1350		374	286	334
1350		388	271	335
4850		219	194	208
2850		352	258	310
3100		342	243	297
1350		374	286	334
1350		388	271	335
3100		331	240	290
3350		330	239	289
850		401	289	351
1350		391	275	339
	900	449	319	390
	900	430	341	390
	1900	484	336	417
	900	435	343	394
	900	517	351	442
	3400	520	391	462
	1900	447	372	413





639	359	513	768	469	633.4
690	408	563.1	840.4	501	687.7
885	495	709.5	1050.2	598.8	847.1
705	353	546.6	836	481	676.2
771	418	612.2	902	547	742.2
552	349	460.6	657	447	562.5
635	370	515.8	734	511	633.6
556	348	462.4	660	446	563.7
681	391	550.5	768	452	625.8
334.3	211.2	278.9	401	290.6	351.3
272	184	232.4	354.3	261.8	312.7
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
323.7	227.6	280.5	396.3	310.3	357.6
335.2	207.2	277.6	407.6	288.8	354.1
332	220.9	282	421	310	371
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
335.4	235.6	290.5	418.2	329.4	378.2
327.2	207.7	273.4	402.8	282.7	348.8
346.3	202.5	281.6	425.2	279.3	359.5
419	253	344.3	506.7	333.8	428.9
434	265	358	523	351.1	445.6
321	213	272.4	404.7	256.6	338.1
259.8	171.2	219.9	339.8	244.6	297
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
372	240	312.6	459.5	330.5	401.4
295.1	203.2	253.7	379.2	271.3	330.6
340.4	215.5	284.2	415.9	287	357.9
300.9	196.7	254	372	280.4	330.8
259.8	171.2	219.9	339.8	244.6	297
315	214	269.6	381.3	298.8	344.2
307	192	255.2	360.5	262	316.2
333.9	197.2	272.4	403.3	271.8	344.1
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
161	137	150.2	219	193.9	207.7
270	181	230	351.9	257.7	309.5
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
268	179	228	331	240	290
266	162	219.2	330	239	289
328.2	217.8	278.5	400.9	289.4	350.7
339.6	206.8	279.8	391.3	275	339
372	238	311.7	449	319	390.5
339.6	244.4	296.8	429.9	341.3	390
407	248	335.4	484	336	417.4
343.6	246	299.7	434.6	343.5	393.6
422	248	343.7	517	351	442.3
416	281	355.2	520.1	390.6	461.8
354	267	314.8	446.9	371.8	413.1

City	State	Wounded to come to aid	Distance	Comb Vol Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT
		N	4.2			4.2		
		N	2.9			2.9		
		N	4.2			4.2		
		N	4.2			4.2		
		N	3.8			3.8		
		N	4.2			4.2		
		N	4.2			4.2		
		N	3.8			3.8		
		N	3.8			3.8		
		N	4.2			4.2		
		N	4.2			4.2		
		N	4.2			4.2		
		N	3.8			3.8		
		N	3.6			3.6		
		N	4.2			4.2		
		N	4.5			4.5		
		N	4.8			4.8		
		N	4.8			4.8		
		N	4.8			4.8		
		N	4.8			4.8		
		N	5.3			5.3		
		N	6.2			6.2		
		N	4.3			4.3		
		N	4.3			4.3		
		N	4.3			4.3		
		N	4.3			4.3		
		N	4.8			4.8		
		N	3.8			3.8		
		N	4.5			4.5		
		N	5.6			5.6		
		N	5.6			5.6		
		N	5.6			5.6		
		N	4.8			4.8		
		N	5			5		
		N	4.8			4.8		
		N	5			5		
		N	4.8			4.8		
		N	5			5		
		N	5			5		
		N	5.3			5.3		
		N	3.8			3.8		
		N	3.8			3.8		
		N	5			5		
		N	7.1			7.1		
		N	5.6			5.6		
		N	7.1			7.1		
		N	6.7			6.7		
		N	5.9			5.9		
		N	7.1			7.1		
		N	6.7			6.7		

N	7.1	7.1
N	7.7	7.7
N	10	10
N	7.7	7.7
N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	4	4
N	3.1	3.1
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.3	2.3
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8

2017-FFP\_005439



[illegible]

[illegible]

mined)

















**To:** richard.thomas@vw.com[]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;oliver.schmidt@vw.com[];  
liver.schmidt@vw.com[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Tue 10/16/2012 8:38:05 PM  
**Subject:** re: 2013 FE Guide - Errors in EPA's data base as of Oct 15, 2012 which held up  
posting on [www.fueleconomy.gov](http://www.fueleconomy.gov)  
[VW\\_Group\\_2013\\_FEGuide1-all-rel dates-no-sales 10-15-2012.xlsx](#)

Richard,

Attached are the data in Verify as of Oct 15, 2012. Labels with pea green fill in the first few columns were not sent to DOE on Oct 16, 2012 for posting on the web. The next normal posting will be November 1, 2012.

Please make any needed corrections as soon as possible.

Thanks



EPA comr	VERIFY cc	Model Yr (Mfr Name	Division (1	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
		2013 Audi	Audi	A3	ADX	59	2.0 4
Diesel;		2013 Audi	Audi	A3	ADX	73	2.0 4
		2013 Audi	Audi	A3	ADX	58	2.0 4
		2013 Audi	Audi	A3 quattro	ADX	60	2.0 4
		2013 Audi	Audi	A4	ADX	35	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	37	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	102	2.0 4
		2013 Audi	Audi	A4 quattro	ADX	40	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX	36	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX quattro	39	2.0 4
		2013 Audi	Audi	A5 Cabriolet	ADX quattro	104	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	38	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	103	2.0 4
		2013 Audi	Audi	A5 quattro	ADX	41	2.0 4
		2013 Audi	Audi	A6	ADX	65	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	70	2.0 4
		2013 Audi	Audi	A6 quattro	ADX	77	3.0 6
		2013 Audi	Audi	A7 quattro	ADX	76	3.0 6
Relabeled.	Please include in model type comment field the reason for relabeling (if not already pro	2013 Audi	Audi	A8	ADX	128	4.0 8
Relabeled.	Please include in model type comment field the reason for relabeling (if not already pro	2013 Audi	Audi	A8	ADX	98	4.0 8
		2013 Audi	Audi	A8L	ADX	97	4.0 8
		2013 Audi	Audi	A8L	ADX	109	6.3 12
		2013 Audi	Audi	allroad quattro	ADX	101	2.0 4
		2013 Audi	Audi	allroad quattro	ADX	134	2.0 4
		2013 Audi	Audi	Q5	ADX	91	2.0 4
		2013 Audi	Audi	Q5	ADX	105	2.0 4
Error in co		2013 Audi	Audi	Q5	ADX	106	3.0 6
Hybrid;		2013 Audi	Audi	Q5 Hybrid	ADX	95	2.0 4
Diesel;		2013 Audi	Audi	Q7	ADX	53	3.0 6
		2013 Audi	Audi	Q7	ADX	61	3.0 6
		2013 Audi	Audi	RS5	ADX	49	4.2 8
		2013 Audi	Audi	RS5 Cabriolet	ADX	52	4.2 8
		2013 Audi	Audi	S4	ADX	42	3.0 6
		2013 Audi	Audi	S4	ADX	45	3.0 6
		2013 Audi	Audi	S5	ADX	43	3.0 6
		2013 Audi	Audi	S5	ADX	46	3.0 6
		2013 Audi	Audi	S5 Cabriolet	ADX	44	3.0 6
		2013 Audi	Audi	S6	ADX	48	4.0 8
		2013 Audi	Audi	S7	ADX	47	4.0 8
		2013 Audi	Audi	S8	ADX	99	4.0 8
		2013 Audi	Audi	TT Coupe quattro	ADX	66	2.0 4
		2013 Audi	Audi	TT Roadster	ADX	67	2.0 4
		2013 Audi	Audi	TTRS Coup	ADX	69	2.5 5
		2013 Bentley	Bentley Motors	Continental	BEX	110	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX	108	4.0 8
		2013 Bentley	Bentley Motors	Continental	BEX	113	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX	131	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX C	107	4.0 8
		2013 Bentley	Bentley Motors	Continental	BEX C	111	6.0 12
		2013 Bentley	Bentley Motors	Continental	BEX C	130	6.0 12

	2013 Bentley	Bentley Continental BEX	112	6.0	12
	2013 Bentley	Bentley Mulsanne BEX	96	6.8	8
	2013 Bugatti	Bugatti Veyron BGT	88	8.0	16
	2013 Lamborghini	Lamborghini Aventador Coupe	92	6.5	12
	2013 Lamborghini	Lamborghini Aventador Roadster	93	6.5	12
	2013 Lamborghini	Lamborghini Gallardo Coupe	30	5.2	10
	2013 Lamborghini	Lamborghini Gallardo CNLX	32	5.2	10
	2013 Lamborghini	Lamborghini Gallardo Spyder	31	5.2	10
	2013 Lamborghini	Lamborghini Gallardo SNLX	33	5.2	10
	2013 Volkswagen	Volkswagen BEETLE VWX	19	2.0	4
Diesel;	2013 Volkswagen	Volkswagen BEETLE VWX	94	2.0	4
Diesel;	2013 Volkswagen	Volkswagen BEETLE VWX	84	2.0	4
	2013 Volkswagen	Volkswagen BEETLE VWX	89	2.0	4
	2013 Volkswagen	Volkswagen BEETLE VWX	17	2.5	5
	2013 Volkswagen	Volkswagen BEETLE VWX	27	2.5	5
	2013 Volkswagen	Volkswagen BEETLE CONVERTIBLE	20	2.0	4
Diesel;	2013 Volkswagen	Volkswagen BEETLE CONVERTIBLE	85	2.0	4
	2013 Volkswagen	Volkswagen BEETLE CONVERTIBLE	90	2.0	4
	2013 Volkswagen	Volkswagen BEETLE CONVERTIBLE	18	2.5	5
	2013 Volkswagen	Volkswagen CC VWX	1	2.0	4
	2013 Volkswagen	Volkswagen CC VWX	4	2.0	4
	2013 Volkswagen	Volkswagen CC VWX	2	3.6	6
	2013 Volkswagen	Volkswagen CC 4MOTION VWX	3	3.6	6
	2013 Volkswagen	Volkswagen EOS VWX	21	2.0	4
Diesel;	2013 Volkswagen	Volkswagen GOLF VWX	72	2.0	4
Diesel;	2013 Volkswagen	Volkswagen GOLF VWX	81	2.0	4
	2013 Volkswagen	Volkswagen GOLF VWX	16	2.5	5
	2013 Volkswagen	Volkswagen GOLF VWX	26	2.5	5
	2013 Volkswagen	Volkswagen Golf R VWX	57	2.0	4
	2013 Volkswagen	Volkswagen GTI VWX	22	2.0	4
	2013 Volkswagen	Volkswagen GTI VWX	23	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	50	2.0	4
Diesel;	2013 Volkswagen	Volkswagen Jetta VWX	71	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	86	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	87	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	51	2.0	4
Diesel;	2013 Volkswagen	Volkswagen Jetta VWX	80	2.0	4
	2013 Volkswagen	Volkswagen Jetta VWX	15	2.5	5
	2013 Volkswagen	Volkswagen Jetta VWX	25	2.5	5
Hybrid;	2013 Volkswagen	Volkswagen Jetta Hybrid VWX	100	1.4	4
Diesel;	2013 Volkswagen	Volkswagen JETTA SPORT V6 V6	74	2.0	4
Diesel;	2013 Volkswagen	Volkswagen JETTA SPORT V6 V6	79	2.0	4
	2013 Volkswagen	Volkswagen JETTA SPORT V6 V6	14	2.5	5
	2013 Volkswagen	Volkswagen JETTA SPORT V6 V6	24	2.5	5
Diesel;	2013 Volkswagen	Volkswagen Passat VWX	62	2.0	4
Diesel;	2013 Volkswagen	Volkswagen Passat VWX	64	2.0	4
	2013 Volkswagen	Volkswagen Passat VWX	83	2.5	5
	2013 Volkswagen	Volkswagen Passat VWX	82	2.5	5
	2013 Volkswagen	Volkswagen Passat VWX	63	3.6	6
	2013 Volkswagen	Volkswagen Tiguan VWX	68	2.0	4
	2013 Volkswagen	Volkswagen Tiguan VWX	56	2.0	4
	2013 Volkswagen	Volkswagen Tiguan 4MOTION	55	2.0	4
Diesel;	2013 Volkswagen	Volkswagen Touareg VWX	54	3.0	6
	2013 Volkswagen	Volkswagen Touareg VWX	78	3.6	6
Hybrid;	2013 Volkswagen	Volkswagen Touareg Hybrid VWX	75	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd HW	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(AM-S6)	21	28	24				26.6	38.2	30.8102
Auto(AM-S6)	30	42	34				39.0935	59.3437	46.1856
Manual(M6)	21	30	24				25.3	40.3	30.3902
Auto(AM-S6)	21	28	24				27.2	37.1	30.9119
Auto(AV-S8)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	24	31	26				30.1185	44.4328	35.2251
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	20	29	24				25.8291	40.6029	30.8864
Manual(M6)	22	32	26				27.624	43.9699	33.1736
Auto(AV-S8)	25	33	28				31.4	46.9	36.8857
Auto(S8)	20	30	24				25.6856	40.5676	30.7641
Auto(S8)	18	27	22				23.1369	38.1	28.1037
Auto(S8)	18	28	21				22.5575	37.3745	27.4556
Auto(S8)	17	28	21				21.7885	38.4	27.0553
Auto(S8)	16	26	19				19.8586	33.9	24.4081
Auto(S8)	13	21	16				15.9	25.7	19.1935
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	27	23				25.2	37.3	29.5075
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	20	28	23				24.8	38.6	29.5548
Auto(S8)	18	26	21				22.8446	35.5	27.2096
Auto(S8)	24	30	26				30.4	39.9	34.048
Auto(S8)	19	28	22				22.8	39.1	28.0649
Auto(S8)	16	22	18				19.2813	29.852	22.9361
Auto(AM-S7)	16	23	18				19.1	30	22.8332
Auto(AM-S7)	16	22	18				19.2	28.9	22.6159
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	28	21				22.4	35.8	26.9372
Manual(M6)	17	26	20				20	33.4	24.4063
Auto(AM-S7)	18	26	21				22.1	34.7	26.4165
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(AM-S7)	17	27	20				20.7539	35.335	25.4866
Auto(S8)	15	26	19				19	33.3	23.5511
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Auto(AM-S6)	22	31	26				28.4068	42.2579	33.3217
Manual(M6)	18	25	20				21.2	34.2	25.5746
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	15	24	18				19	33.5	23.5959
Auto(S6)	12	19	14				13.9	24.7	17.3049
Auto(S8)	12	21	15				15.4	28.3	19.3741
Auto(S8)	14	24	17				17.4	30.8	21.6358
Auto(S6)	11	19	14				13.7	24.6	17.112
Auto(S8)	12	20	15				14.4	26.7	18.1658

Auto(S6)	12	19	14	13.9	24.7	17.3049
Auto(S8)	11	18	13	12.9	21.8	15.8033
Auto(AM-S7)	8	15	10	10	17.9	12.4782
Auto(AM-S7)	11	18	13	12.6	25.2	16.2581
Auto(AM-S7)	10	16	12	11.5	21.2	14.4817
Auto(AM-S6)	13	20	16	16.1	25.4	19.276
Manual(M6)	12	20	15	14	24	17.2308
Auto(AM-S6)	13	20	16	16	25.4	19.197
Manual(M6)	12	20	14	13	22.6	16.0722
Auto(AM-S6)	22	30	25	26.5	42.0656	31.7942
Auto(AM-S6)	29	39	32	37.3	55.3	43.7011
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	22	29	25	27.3832	39.0128	31.6255
Manual(M5)	22	31	25	26.4199	42.8586	31.9312
Auto(AM-S6)	21	29	24	26.8	40.2092	31.532
Manual(M6)	28	41	32	36.066	57.9978	43.4617
Manual(M6)	21	30	24	25.2999	41.4024	30.6672
Auto(S6)	21	27	23	26.4935	37.7702	30.6054
Auto(AM-S6)	22	31	25	26.977	42.4936	32.2814
Manual(M6)	21	32	25	25.7303	43.9687	31.6354
Auto(S6)	17	27	21	21.2	35.1	25.7972
Auto(S6)	17	25	20	20.5	33.5	24.8373
Auto(AM-S6)	22	30	25	27.5	41.5	32.4219
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Manual(M6)	19	27	22	23.9	37.1	28.456
Auto(AM-S6)	24	33	27	29.9333	43.5096	34.8229
Manual(M6)	21	31	25	26.0527	41.2042	31.2185
Auto(AM-S6)	24	32	27	29.5139	45.1099	34.9517
Auto(AM-S6)	30	42	34	39.0935	59.3437	46.1856
Auto(S6)	23	29	25	28.1	41.499	32.8768
Manual(M5)	24	34	28	28.8	46.2	34.6771
Manual(M6)	22	33	26	26.5556	44.9945	32.56
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S7)	41	46	43	55.4	65.2	59.419
Auto(AM-S6)	29	39	33	37.6	56.2	44.1798
Manual(M6)	30	42	34	38.747	59.8138	46.0447
Auto(S6)	24	31	26	28.0549	42.473	33.1132
Manual(M5)	23	33	26	26.3044	44.5088	32.2378
Auto(AM-S6)	30	40	34	37.9	56.8	44.5744
Manual(M6)	31	43	35	38.2	62.8	46.3746
Auto(S6)	22	31	25	27.0219	40.7879	31.8608
Manual(M5)	22	32	26	26.1361	42.9279	31.7195
Auto(AM-S6)	20	28	23	23.9	37.3	28.5088
Auto(S6)	21	26	23	26.0779	36.3534	29.8782
Manual(M6)	18	26	21	21.7	35.8	26.3745
Auto(S6)	20	26	23	25.7924	36.0745	29.5873
Auto(S8)	20	29	23	24.1	22.4	23.3041
Auto(S8)	17	23	19	21.3	31.6	24.9612
Auto(S8)	20	24	21	25.1	33.1	28.1631

City	City	Fuel	Unrd	Comb	Unr	Guzzler?	Air	Aspir	IAir	Aspira	Trans	Trans	Des	Trans, Otr	#	Gears
21.3388	27.7919	23.8286					TC		Turbocharged	AMS		Automated	Manual-	Selectable		(e.g. Au
29.8946	41.5209	34.2046					TC		Turbocharged	AMS		Automated	Manual-	Selectable		(e.g. Au
20.8146	29.9953	24.1394					TC		Turbocharged	MS		Manual			6	
20.891	28.1035	23.6187					TC		Turbocharged	AMS		Automated	Manual-	Selectable		(e.g. Au
23.6355	30.6684	26.3554					TC		Turbocharged	V		Selectable	Continuously	Variable		(e.g. C
20.3576	29.8271	23.7508					TC		Turbocharged	MS		Semi-Automatic			8	
20.402	28.949	23.5279					TC		Turbocharged	MS		Semi-Automatic			8	
22.2425	32.0861	25.8049					TC		Turbocharged	MS		Manual			6	
23.6355	30.6684	26.3554					TC		Turbocharged	V		Selectable	Continuously	Variable		(e.g. C
20.3576	29.8271	23.7508					TC		Turbocharged	MS		Semi-Automatic			8	
20.402	28.949	23.5279					TC		Turbocharged	MS		Semi-Automatic			8	
20.3576	29.8271	23.7508					TC		Turbocharged	MS		Semi-Automatic			8	
20.402	28.949	23.5279					TC		Turbocharged	MS		Semi-Automatic			8	
22.2425	32.0861	25.8049					TC		Turbocharged	MS		Manual			6	
24.5044	32.5529	27.5721					TC		Turbocharged	V		Selectable	Continuously	Variable		(e.g. C
20.3576	29.8271	23.7508					TC		Turbocharged	MS		Semi-Automatic			8	
18.3949	27.2332	21.5408					SC		Supercharged	MS		Semi-Automatic			8	
17.8058	27.5484	21.1758					SC		Supercharged	MS		Semi-Automatic			8	
8(474058	27.7919	21.1758					SC		Supercharged	MS		Semi-Automatic			8	
17.2616	28.4347	20.9695					TC		Turbocharged	MS		Semi-Automatic			8	
8(474058	27.7919	21.1758					SC		Supercharged	MS		Semi-Automatic			8	
16.0273	25.8053	19.3219					TC		Turbocharged	MS		Semi-Automatic			8	
13.1387	20.6025	15.6978	G				NA		Naturally Aspirated	MS		Semi-Automatic			8	
19.9584	26.6824	22.5112					TC		Turbocharged	MS		Semi-Automatic			8	
19.9584	26.6824	22.5112					TC		Turbocharged	MS		Semi-Automatic			8	
19.7289	28.2351	22.823					TC		Turbocharged	MS		Semi-Automatic			8	
19.6619	27.5771	22.5781					TC		Turbocharged	MS		Semi-Automatic			8	
17.8443	25.5746	20.6536					SC		Supercharged	SA		Semi-Auto			8	
24.0075	29.7936	26.3065					TC		Turbocharged	MS		Semi-Automatic			8	
18.74	27.62	21.9099					TC		Turbocharged	MS		Semi-Automatic			8	
15.522	21.5458	17.7559					SC		Supercharged	MS		Semi-Automatic			8	
15.7409	23.3075	18.4339					NA		Naturally Aspirated	AMS		Automated	Manual-	Selectable		(e.g. Au
15.8793	22.1836	18.2078					NA		Naturally Aspirated	AMS		Automated	Manual-	Selectable		(e.g. Au
18.117	27.558	21.419					SC		Supercharged	AMS		Automated	Manual-	Selectable		(e.g. Au
17.0438	26.023	20.1767					SC		Supercharged	MS		Manual			6	
18.117	27.558	21.419					SC		Supercharged	AMS		Automated	Manual-	Selectable		(e.g. Au
17.0438	26.023	20.1767					SC		Supercharged	MS		Manual			6	
17.6699	25.953	20.6333					SC		Supercharged	AMS		Automated	Manual-	Selectable		(e.g. Au
16.761	26.9697	20.2022					TC		Turbocharged	AMS		Automated	Manual-	Selectable		(e.g. Au
16.761	26.9697	20.2022					TC		Turbocharged	AMS		Automated	Manual-	Selectable		(e.g. Au
15.2801	25.5632	18.6574					TC		Turbocharged	MS		Semi-Automatic			8	
22.407	31.1674	25.6515					TC		Turbocharged	AMS		Automated	Manual-	Selectable		(e.g. Au
22.407	31.1674	25.6515					TC		Turbocharged	AMS		Automated	Manual-	Selectable		(e.g. Au
17.751	25.2021	20.4751					TC		Turbocharged	M		Manual			6	
11.2476	18.7327	13.7134	G				TC		Turbocharged	SA		Semi-Auto			6	
15.0109	24.4645	18.1706					TC		Turbocharged	SA		Semi-Auto			8	
11.5043	18.877	13.9574	G				TC		Turbocharged	MS		Semi-Automatic			6	
12.4737	21.0866	15.2827	G				TC		Turbocharged	MS		Semi-Automatic			8	
14.0639	23.9773	17.2766	G				TC		Turbocharged	MS		Semi-Automatic			8	
11.2476	18.7327	13.7134	G				TC		Turbocharged	MS		Semi-Automatic			6	
12.0226	20.0478	14.6643	G				TC		Turbocharged	MS		Semi-Automatic			8	

11.5043	18.877	13.9574	G	TC	Turbocharged	Semi-Automatic	6
10.5402	17.7129	12.8889	G	TC	Turbocharged	Semi-Automatic	8
8.4232	14.7698	10.4424	G	TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
10.6055	18.4729	13.1199	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
9.7957	16.2453	11.9264	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
13.4655	19.7573	15.718	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
12.0883	19.9831	14.7021	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
13.3954	19.7741	15.6701	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
11.5388	19.5451	14.1465	G	NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
22.0202	29.5574	24.8746		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
28.6469	38.87	32.4925		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
20.5408	29.7034	23.8517		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
22.2864	28.5683	24.7338		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.7201	30.6767	25.0054		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.1383	28.6751	23.9738		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
27.8088	40.6616	32.4203		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
20.5408	29.7034	23.8517		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
21.2302	26.9749	23.4804		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.8706	31.0367	25.2227		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
20.8232	31.7255	24.6324		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
17.4935	26.5716	20.6716		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
16.9415	25.219	19.8774		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.7634	30.1121	24.8658		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.6446	31.0458	26.486		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
22.7343	32.7402	26.3594		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
19.278	26.8882	22.0917		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
24.2237	32.5108	27.3624		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
21.2839	30.8324	24.7304		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.7854	31.6043	26.7652		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.8946	41.5209	34.2046		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.1009	29.1554	25.4822		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
24.3944	33.6309	27.8344		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.8931	32.6043	25.6912		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.6446	31.0458	26.486		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
22.7343	32.7402	26.3594		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
40.7039	45.7221	42.8187		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
28.8556	39.4682	32.8278		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
29.6183	41.8508	34.104		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
23.6446	31.0458	26.486		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
22.7343	32.7402	26.3594		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
30.4633	40.2057	34.1916		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
30.8024	42.6219	35.1943		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
22.1078	30.6611	25.2814		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
21.8993	32.1378	25.5642		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
19.7174	27.8048	22.6868		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
20.6233	26.0617	22.7606		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
18.1488	26.2617	21.0791		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
20.402	25.8545	22.5412		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
19.649	28.9961	22.9829		TC	Turbocharged	AMS	Automated Manual- Selectable (e.g. Au
17.0411	22.7325	19.2048		NA	Naturally Aspirated	AMS	Automated Manual- Selectable (e.g. Au
19.8843	23.7762	21.4655		SC	Supercharged	AMS	Automated Manual- Selectable (e.g. Au

Lockup T	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Yomated M	N	Manual with P	2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	2-Wheel D	DAEXV02.00U5N		5	DU	Diesel, ultra low s	
N	N	F	2-Wheel D	DAEXV02.03PA	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium	
MT with pad	N	F	2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXJ02.0FUB	85	406	GP	Gasoline (Premium	
N	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium	
MT with pad	N	F	2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXJ02.0FUB	85	406	GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXJ02.0FUB	85	406	GP	Gasoline (Premium	
N	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium	
MT with pad	N	F	2-Wheel D	DAEXV02.03UB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV06.3UA8	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXJ02.0FUB	85	389	GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV02.03UB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXT02.04UB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXJ02.0FUB	85	447	GP	Gasoline (Premium	
Y	N	A	All Wheel	IDADXJ03.!	10		GP	Gasoline (I	
Y	N	A	All Wheel	DAEXT02.0HUB	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXT03.03UG		5	DU	Diesel, ultra low s	
Y	N	A	All Wheel	DAEXT03.0TLF	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	DAEXV04.23UL	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	DAEXV04.23UL	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium	
N	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium	
N	N	A	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	DAEXJ03.03UF	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	DAEXV02.03UA	10		GP	Gasoline (Premium	
Yomated M	N	Manual with P	All Wheel	IDADXV02.!	10		GP	Gasoline (F	
N	N	A	All Wheel	IDADXV02.!	10		GP	Gasoline (F	
Y	N	A	All Wheel	IDBEXV06.C	85	333	GP	Gasoline (F	
Y	N	A	All Wheel	IDADXV04.!	10		GP	Gasoline (F	
Y	N	A	All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium	
Y	N	A	All Wheel	DBEXV06.04UC	85	364	GP	Gasoline (Premium	
Y	N	A	All Wheel	DAEXV04.03UJ	10		GP	Gasoline (Premium	
Y	N	A	All Wheel	DBEXV06.0501	85	333	GP	Gasoline (Premium	
Y	N	A	All Wheel	DBEXV06.04UC	85	357	GP	Gasoline (Premium	

Y	N	A	All Wheel Drive	DV06.0501	85	333	GP	Gasoline (Premium
Y	N	R	2-Wheel Drive	DV06.84LA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		All Wheel Drive	DV08.0V16	10		GPR	Gasoline (Premium
Y	Manual with Paddles)		All Wheel Drive	DV06.5L83	10		GPR	Gasoline (Premium
Y	Manual with Paddles)		All Wheel Drive	DV06.5L83	10		GPR	Gasoline (Premium
Y	Manual with Paddles)		All Wheel Drive	DV05.2LR8	10		GP	Gasoline (Premium
N	N	A	All Wheel Drive	DV05.	10		GP	Gasoline (I
Y	Manual with Paddles)		All Wheel Drive	DV05.2LR8	10		GP	Gasoline (Premium
N	N	A	All Wheel Drive	DV05.	10		GP	Gasoline (I
Y	Manual with Paddles)		2-Wheel Drive	DVWXJ02.0	10		GP	Gasoline (F
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultr
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVWXV03.6U46	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DVXV03.6U46	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.03SA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
N	N	A	All Wheel Drive	DVXV02.03UA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.0U36	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.0U36	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV01.4PHE	10		GP	Gasoline (Premium
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.0U5N		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV02.0U4S		5	DU	Diesel, ultra low s
N	N	F	2-Wheel Drive	DVWXV02.0U4S		5	DU	Diesel, ultra low s
Y	N	F	2-Wheel Drive	DVWXV02.5U3A	10		G	Gasoline (Regular
N	N	F	2-Wheel Drive	DVWXV02.5U3M	10		G	Gasoline (Regular
Y	Manual with Paddles)		2-Wheel Drive	DVWXV03.6U41	10		GP	Gasoline (Premium
Y	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
N	N	F	2-Wheel Drive	DVWXV02.03UA	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DVWXJ02.03UA	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DVXT03.02UG		5	DU	Diesel, ultra low s
Y	N	A	All Wheel Drive	DVXT03.6U76	10		GP	Gasoline (Premium
Y	N	A	All Wheel Drive	DVXT03.0HEV	10		GP	Gasoline (Premium



Product Name	Category	Gas Guzz	Gas Guzz	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MAR	Lead	Released	Not exempt	89	20				
MAR	(15 p	Released	Not exempt	89	20				
MAR	Lead	Released	Not exempt	89	20				
MAR	Lead	Released	Not exempt			89	20		
MAR	Lead	Released	Not exempt			91	12		
MAR	Lead	Released	Not exempt			91	12		
MAR	Lead	Released	Not exempt			91	12		
MAR	Lead	Released	Not exempt			91	12		
MAR	Lead	Released	Not exempt	81	10				
MAR	Lead	Released	Not exempt	81	10				
MAR	Lead	Released	Not exempt	81	10				
MAR	Lead	Released	Not exempt	84	12				
MAR	Lead	Released	Not exempt	84	12				
MAR	Lead	Released	Not exempt	84	12				
MAR	Lead	Released	Not exempt			98	16		
MAR	Lead	Released	Not exempt			98	16		
MAR	Lead	Released	Not exempt			98	16		
MAR	Lead	Released	Not exempt					94	25
MAR	Lead	Released	Not exempt			100	15		
MAR	Lead	Released	Not exempt			100	15		
MAR	Lead	Released	Not exempt			107	15		
MAR	Lead	Released	Not exempt			107	15		
MAR	Lead	Released	Not exempt			107	15		
MAR	Lead	Released	Not exempt			90	28		
MAR	Lead	Released	Not exempt			90	28		
MAR	Lead	Released	Truck						
MAR	Lead	Released	Truck						
MAR	Lead	Released	Truck						
MAR	(15 p	Released	Truck						
MAR	Lead	Released	Truck						
MAR	Lead	Released	Not exempt	84	13				
MAR	Lead	Released	Not exempt	81	10				
MAR	Lead	Released	Not exempt			90	13		
MAR	Lead	Released	Not exempt			90	13		
MAR	Lead	Released	Not exempt	84	13				
MAR	Lead	Released	Not exempt	84	13				
MAR	Lead	Released	Not exempt	81	10				
MAR	Lead	Released	Not exempt			98	16		
MAR	Lead	Released	Not exempt					94	25
MAR	Lead	Released	Not exempt			100	15		
MAR	Lead	Released	Not exempt	74	13				
MAR	Lead	Released	Not exempt						
MAR	Lead	Released	Not exempt					74	13
MAR	Lead	Released	Not exempt	102	13				
MAR	Lead	Released	Not exempt	89	11				
MAR	Lead	Released	Not exempt	89	11				
MAR	Lead	Released	Not exempt	89	11				
MAR	Lead	Released	Not exempt	86	7				
MAR	Lead	Released	Not exempt	86	7				
MAR	Lead	Released	Not exempt	86	7				

2017-FFP 005461

Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadjusted
2400	2400	corrected SMOG rating for BIN 3 PZEV models nationwide, correct unadj unrnd city highway C	
1700	1700	corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre	
2400	2400	corrected SMOG rating, all models are BIN 3 PZEV nationwide, corrected CO2 values	
2400	2400	reprocessed to pick up change to A3 quattro carline correction, corrected combined adj CO2 v	
2200	2200	corrected forward speed to 8 on this CVT transmission, corrected combined adjusted unrnd	
2400	2400	added A6 quattro configuration data to the base level, corrected gas guzzler MPG valuwe and	
2400	2400	corrected unadj unrnd highway CO2 and then the reounded number is correct. 8558	
2200	2200		
2200	2200	corrected forward speeds to 8, unadj unrnd combined CO2 value corrected again Aug 14th	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and	
2400	2400	corrected unadj unrnd highway CO2 and then the reounded number is correct. 8558	
2400	2400	added A6 quattro configuration data to the base level; corrected gas guzzler MPG valuwe and	
2400	2400	corrected unadj unrnd highway CO2 and then the reounded number is correct. 8558	
2200	2200		
2050	2050	corrected forward speeds to 8, for this CVT trans	
2400	2400	corrected gas guzzler MPG valuwe and gallons per 100 value...these values were switched	
2600	2600		
2700	2700	corrected unadj unrnd city CO2 value again on Aug 14th, S/S set to yes	
2700	2700	600.314-08(e)(4); the label was recalulated after completion of EPA confirmatory testing and	
2700	2700	S/S set to yes	
2700	2700	the label was recalulated after completion of EPA confirmatory testing and then added new A	
3000	3000	S/S set to yes	
3550	3550	corrected hwy test value typo to 25.7 mpg, release date change to week 32, changed fuel con	
2500	2500	14 18 15 17.1	
2500	2500	corrected combined fuel economy value to 23 MPG from 22 MPG, corrected adj unrounded c	
2500	2500	corrected unadj unrounded highway and conbined values	
2500	2500	14 19 16 17.4	
2700	2700		
2200	2200		
2600	2600	CO2 corrections, additonal fuel costs in saving field, corrected Aug 14th	
3150	3150	CO2 corrections, again Aug 14th, Aug 23 CO2 rounding....adjusted whole CO2 from unadjuste	
3150	3150	CO2 corrections	
3150	3150	corrected city CO2 value, typo	
2700	2700	corrected city unadj unrnd CO2, Aug 14th correct	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected city unadj unrounded CO2 , Aug 14th	
2850	2850	corrected unrounded unadjusted city value, 5 year spending corrected to \$2,650, correct una	
2700	2700	corrected unadj and adj CO2 values, Aug 14th	
2850	2850	CO2 corrections	
2850	2850	CO2 corrections	
3000	3000		
2200	2200	CO2 corrections, Aug 14th correction	
2200	2200	CO2 corrections, Aug 14th	
2850	2850		
4050	4050	corrected i8 13 10 9.5	
3150	3150		
4050	4050	correct adj unrounded and rounded comb CO2 values Aug 14th	10.3
3800	3800	corrected highway unadjusted value	10.5
3350	3350		
4050	4050	corrected Comb adj unrnd CO2 10 9.5	
3800	3800	corrected axle ratio 15 11 10.5	

4050	4050 CO2 rounding correction on Aug 23rd	10.3
4400	4400	
5700	5700 corrected lock out to "yes" and AMS.	
4400	4400 lock up to YES., CO2 corrections Aug 14, S/S set to yes, CO2 rounding correction Aug 23rd	
4750	4750 adjusted release date, lock up to YES., CO2 corrections Aug 14th, S/S set to yes	
3550	3550 corrected fuel consumption per ASTM rounding procedure, corrected CO2 Aug 14th	
3800	3800 CO2 rounding correction Aug 23rd	
3550	3550 corrected typo unadj comb value, corrected fuel consumption per ASTM rounding procedure	
4050	4050 CO2 rounding Aug 23rd then again on Aug 27	
2300	2300 CORRECTED ANNUAL FUEL COST, POST RELEASE 10 AND AMS CODE USED	
1800	1800 CO2 corrections Aug 14th, corrected derived 5-cycle method formula with A= 10180 value	
1800	1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c	
2400	2400 corrected CO2 values, corrected fuel cost over 5 years	
2150	2150 early label, corrected after Verify release 10 issue date, SMOG rating corrected for PZEV test g	
2150	2150 corrected annual fuel cost, early label... update after Verify release 10, corrected unadjusted u	
2400	2400 annual fuel cost corrected, post release 10 and AMS used, corrected highway value from 28 t	
1800	1800 corrected to use manufacturer's confirmatory tests, corrected CO2 values; inhouse derived 5-c	
2400	2400 CO2 corrections, fuel spending corrected to \$400	
2300	2300 corrected annual fuel cost, update after Verify release 10, corrected city unrounded unadjust	
2300	2300 adjusted annual fuel cost per CD-11-17.....correct the highway value from 42.1 to 42.0 MPG a	
2300	2300 EPA has assigned new test numbers, UPDATE after Verify release 10, updated sales and corre	
2700	2700 update after Verify release 10	
2850	2850 UPDATE after Verify release 10	
2300	2300 CO2 corrections	
1700	1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre	
1700	1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co	
2050	2050 early label, update after Verify release 10, CO2 corrections	
2050	2050 update after Verify release 10 issued, CO2 comb correction	
2600	2600 CO2 corrections, CO2 rounding corrections Aug 20th	
2100	2100 CO2 corrections	
2300	2300 early label, upate after Verify release 10	
2100	2100 corrected unadjusted unrounded CO2 highway and combined values and combined adjusted w	
1700	1700 corrected CO2 values and formula for derived 5-cycle inhouse calculation, CO2 rounding corre	
2150	2150 corrected fuel savings and ratings, correct fuel economy and GHG rating to 6	
1900	1900 FE and GHG ratings corrected to 7	
2200	2200 CO2 corrections	
1700	1700 corrected CO2 values; inhouse derived 5-cycle formula corrected Aug 15th, CO2 rounding co	
2050	2050 early label, update after Verify release 10, CO2 corrections	
2050	2050 update after Verify release 10 issued, CO2 corrections	
1350	1350 GHG rating corrected to 10, recalc with EPA confirmatory tests	
1750	1750 CO2 corrections; inhouse dervied 5-cycle formula corrected Aug 15th	
1700	1700 corrected CO2 values; CO2 correction inhouse formula Aug 15th, CO2 rounding corrections A	
2050	2050 early label, update after Verify release 10, CO2 corrections	
2050	2050 update after Verify release 10 issued, CO2 corrections	
1700	1700	
1650	1650	
2150	2150 CO2 corrections	
2050	2050 CORRECTED 5 YEAR FUEL SAVINGS, CO2 corrections	
2500	2500 CO2 correction	
2500	2500 corrected CO2 values, CO2 rounding corrections Aug 20th, rounding Aug 23rd	
2700	2700 CO2 corrections, CO2 rounding corrections Aug 20th	
2500	2500 CORRECTED ANNUAL FUEL COST, corrected final drive ratio, CO2 corrections, CO2 rounding c	
2500	2500 CO2 corrections	
3000	3000 CO2 correction Aug 15th, CO2 rounding corrections Aug 20th	
2700	2700 CO2 corrections	

HWY2 Unadj Comb2 Unadj City2 Unadj HWY2 Unadj Comb2 Unadj Range2 - Fuel2 Use Fuel2 Use Fuel2 Unit Fuel2 Unit

O2  
 ction Aug 20th

alue

ded CO2 value again, second time Aug 14th

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per gallon
---------	---------	---------	---------	--------	-----	---	---------------	-----	------------------

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per gallon
---------	---------	---------	---------	--------	-----	---	---------------	-----	------------------

gallons per 100 value...these values were switched

28.7473	21.5258	14.1043	20.4969	16.407	270	E	Ethanol (E85)	MPG	miles per gallon
---------	---------	---------	---------	--------	-----	---	---------------	-----	------------------

then added new A7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to yes

7 quattro data to the base level, corrected unadj unrnd city CO2 value, S/S set to yes

sumption to 6.2 per ASTM rounding procedure

25.6	20.1038	13.5432	18.3117	15.3409	253	E	Ethanol (E85)	MPG	miles per gallon
------	---------	---------	---------	---------	-----	---	---------------	-----	------------------

ity and highway CO2 values

27.1	20.7407	13.7947	19.3602	15.8444	314	E	Ethanol (E85)	MPG	miles per gallon
------	---------	---------	---------	---------	-----	---	---------------	-----	------------------

d weighted values not CO2 to tenths value that is imputted into Verify.

dj comb CO2 value

dj comb CO2 value

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)	MPG	miles per g
------	---------	--------	---------	--------	-----	---	---------------	-----	-------------

17.2	12.569	8.3016	13.5384	10.0512	238	E	Ethanol (E85)	MPG	miles per gallon
------	--------	--------	---------	---------	-----	---	---------------	-----	------------------

20.8	13.5107	8.8115	15.1054	10.8449	262	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	---------	-----	---	---------------	-----	------------------

17.3	11.9181	7.8665	13.2535	9.6274	238	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	--------	-----	---	---------------	-----	------------------

20.5	13.4531	8.6127	14.7094	10.5874	262	E	Ethanol (E85)	MPG	miles per gallon
------	---------	--------	---------	---------	-----	---	---------------	-----	------------------

17.2      12.569      8.3016      13.5384      10.0512      238      E      Ethanol (E85)      miles per gallon

, then CO2 corrections Aug 14th

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

roup, CO2 rounding Aug 23rd  
nrounded highway and combined CO2 values  
o 29 MPG

ycle formular corrected Aug 15th, CO2 rounding corrections Aug 20th

ed MPG value  
nd corresponding 5-cycle values  
cted calculated values

ction Aug 20th  
rrections Aug 20th

hole CO2 value  
ction Aug 20th

rrections Aug 20th

ug 20th

orrections Aug 20th, CO2 rounding Aug 23rd



4650	794	469	648	4650	FFV;	2	23	Subcompact Cars
						1	15	Midsize Cars
						2	21	Two Seaters
						2	21	Two Seaters
						2	21	Two Seaters
					SIDI;	2	21	Two Seaters
					SIDI;	2	21	Two Seate
					SIDI;	2	21	Two Seaters
					SIDI;	2	21	Two Seate
					SIDI;	2	24	Compact C
						2	24	Compact C
						2	24	Compact Cars
					SIDI;	2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
					SIDI;	2	23	Subcompact Cars
						2	23	Subcompact Cars
					SIDI;	2	23	Subcompact Cars
						2	23	Subcompact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	23	Subcompact Cars
						2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
					SIDI;	2	24	Compact Cars
						2	24	Compact Cars
						1	14	Compact Cars
						1	14	Compact Cars
					SIDI;	2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
						2	24	Compact Cars
					SIDI;	2	24	Compact Cars
						2	27	Small Station Wag
						2	27	Small Station Wag
						2	27	Small Station Wag
						2	27	Small Station Wag
						2	25	Midsize Cars
						2	25	Midsize Cars
						2	25	Midsize Cars
						2	25	Midsize Cars
					SIDI;	2	25	Midsize Cars
					SIDI;	2	230	Small SUV 2WD
					SIDI;	2	230	Small SUV 2WD
					SIDI;	2	231	Small SUV 4WD
						2	233	Standard SUV 4W
					SIDI;	2	233	Standard SUV 4W
					SIDI;	2	233	Standard SUV 4W



Car/Truck	Calc Appr Sales	Release DEPA FE Label Dates	Unique La	Label Rec	Relabel	Relabel D
cars	Vehicle Specific 5-cycle	6/11/2012	11328	N	N	
cars	Derived 5-cycle label	6/22/2012	12265	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11302	N	N	
cars	Vehicle Specific 5-cycle	6/11/2012	11487	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12092	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10360	N	N	
car	Derived 5-cycle label	8/28/2012	12549	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9974	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12093	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10362	N	N	
car	Derived 5-cycle label	8/28/2012	12551	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10363	N	N	
car	Derived 5-cycle label	8/28/2012	12550	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	9976	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	11491	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10364	N	N	
car	Derived 5-cycle label	6/25/2012	10288	N	N	
car	Vehicle Specific 5-cycle	6/21/2012	12228	N	N	
car	Vehicle Specific 5-cycle	6/11/2012	12604	N	N	
car	Vehicle Specific 5-cycle	8/15/2012	12227	N	N	
car	Vehicle Specific 5-cycle	8/15/2012	12625	N	N	
car	Vehicle Specific 5-cycle	8/15/2012	12226	N	N	
car	Vehicle Specific 5-cycle	8/16/2012	10646	N	N	
cars	Derived 5-cycle label	8/27/2012	12479	N	N	
cars	Derived 5-cycle label	4/26/2012	11490	N	N	
	Vehicle Specific 5-cycle	7/13/2012	11319	N	N	
	Derived 5-cycle label	9/10/2012	12595	N	N	
	Vehicle Specific 5-cycle	9/21/2012	12655	N	N	
	Vehicle Specific 5-cycle	9/28/2012	12158	N	N	
D	Vehicle Specific 5-cycle	7/16/2012	12105	N	N	
D	Derived 5-cycle label	6/11/2012	12437	N	N	
car	Vehicle Specific 5-cycle	4/8/2012	11510	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	10452	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12106	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11284	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12108	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	11285	N	N	
car	Vehicle Specific 5-cycle	5/21/2012	12111	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11513	N	N	
car	Vehicle Specific 5-cycle	7/30/2012	11512	N	N	
car	Vehicle Specific 5-cycle	8/27/2012	12122	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12115	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	12113	N	N	
car	Vehicle Specific 5-cycle	6/18/2012	10200	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12116	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10208	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12119	N	N	
car	Vehicle Specific 5-cycle	9/28/2012	12686	N	N	
car	Vehicle Specific 5-cycle	4/19/2012	10207	N	N	
car	Vehicle Specific 5-cycle	3/30/2012	12117	N	N	
car	Vehicle Specific 5-cycle	9/28/2012	12640	N	N	

car	Vehicle Specific 5-cycle	3/30/2012	12440		N	N
car	Vehicle Specific 5-cycle	3/30/2012	12211		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11087		N	N
car	Vehicle Specific 5-cycle	3/17/2012	12441		N	N
car	Vehicle Specific 5-cycle	1/14/2013	12234		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12128		N	N
car	Vehicle Specific 5-cycle	6/20/2012	12442		N	N
car	Vehicle Specific 5-cycle	6/21/2012	12130		N	N
car	Vehicle Specific 5-cycle	6/20/2012	12466		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10187		N	N
car	Derived 5-cycle label	7/19/2012	12135		N	N
car	Derived 5-cycle label	6/25/2012	12272		N	N
car	Vehicle Specific 5-cycle	7/12/2012	12271		N	N
car	Vehicle Specific 5-cycle	7/30/2012	12435		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11373		N	N
car	Derived 5-cycle label	7/30/2012	10277		N	N
car	Derived 5-cycle label	6/25/2012	12273		N	N
car	Vehicle Specific 5-cycle	7/12/2012	11526		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11287		N	N
car	Vehicle Specific 5-cycle	1/16/2012	10186		N	N
car	Vehicle Specific 5-cycle	1/25/2012	11044		N	N
car	Vehicle Specific 5-cycle	1/16/2012	10532		N	N
car	Vehicle Specific 5-cycle	1/16/2012	10534		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11527		N	N
car	Derived 5-cycle label	6/22/2012	12264		N	N
car	Derived 5-cycle label	6/25/2012	12268		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11528		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11529		N	N
car	Vehicle Specific 5-cycle	6/11/2012	12277		N	N
car	Vehicle Specific 5-cycle	1/16/2012	11531		N	N
car	Vehicle Specific 5-cycle	7/30/2012	10531		N	N
car	Vehicle Specific 5-cycle	1/18/2012	11372		N	N
car	Derived 5-cycle label	6/22/2012	12263		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11219		N	N
car	Vehicle Specific 5-cycle	6/29/2012	11300		N	N
car	Vehicle Specific 5-cycle	1/16/2012	11532		N	N
car	Derived 5-cycle label	6/25/2012	12267		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11533		N	N
car	Vehicle Specific 5-cycle	7/30/2012	11535		N	N
car	Derived Vehicle Specific 5-cycle	11/19/2012	12658	Calculation Approach for city label but Modified 5-cycle Calculation Appr	N	N
cars	Derived 5-cycle label	6/25/2012	12151		N	N
cars	Derived 5-cycle label	6/25/2012	12266		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11534		N	N
cars	Vehicle Specific 5-cycle	7/30/2012	11536		N	N
car	Vehicle Specific 5-cycle	6/11/2012	10158		N	N
car	Vehicle Specific 5-cycle	6/18/2012	10163		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11539		N	N
car	Vehicle Specific 5-cycle	6/23/2012	11547		N	N
car	Vehicle Specific 5-cycle	6/11/2012	11554		N	N
	Derived 5-cycle label	6/18/2012	12432		N	N
	Vehicle Specific 5-cycle	6/11/2012	12276		N	N
	Derived 5-cycle label	6/11/2012	12431		N	N
D	Vehicle Specific 5-cycle	6/18/2012	11563		N	N
D	Derived 5-cycle label	6/25/2012	12278		N	N
D	Derived 5-cycle label	6/25/2012	11559		N	N

Suppressor	Police/Em	Comment	Cyl Deact	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Energy St
N	N	Test Group	Qualifies as PZEV.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N		N	N		N			
N	N	Test Group	Qualifies as PZEV.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N	ENGINE CODE	CDMA ONLY.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	Intake and	Exhaust	cam	timing is electronically con	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine code	CPMA	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	N					
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	Continuously	intake and	exhaust	cam adjustment	
N	N		N	Y	Continuously	intake and	exhaust	cam adjustment	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	ENGINE CODE	CDMA ONLY.	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N	ENGINE CCN		Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N		N	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	
N	N	Continent	N	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M	
N	N	Engine Coc	Y	Deactivat	Y	Continuou	Y	Multi-lobe	
N	N	Continental	N	Flying Spur	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M
N	N		N	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M	
N	N	Engine Code	CEUA. Standard	Y	CONTINUOUS	VARIABLE	VALVE	TIMING	SYSTEM
N	N	Continental	N	Flying Spur	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M
N	N		N	Y	INLET AND	OUTLET	CONTINUOUSLY	VARIABLE / M	

2017-FFP 005471

Device Desc	Battery	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit
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These observations are for the purpose of the investigation and are not to be used for any other purpose.

These observations are for the purpose of the investigation and are not to be used for any other purpose. The data are not to be used for any other purpose.

1 Lithium Ion	266	5	37 On-Board
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These observations are for the purpose of the investigation and are not to be used for any other purpose.

These observations are for the purpose of the investigation and are not to be used for any other purpose.

These observations are for the purpose of the investigation and are not to be used for any other purpose.

STMENT

MECHANICAL-HYDRAULIC

These observations are for the purpose of the investigation and are not to be used for any other purpose.

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

These observations are for the purpose of the investigation and are not to be used for any other purpose.

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC

MECHANICAL-HYDRAULIC  
adjust valves on a single camshaft. No change in valve overlaps.  
MECHANICAL-HYDRAULIC  
ON CONTINUOUSLY VVT  
ON CONTINUOUSLY VVT  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
MECHANICAL-HYDRAULIC  
E / MECHANICAL-HYDRAULIC  
controlled and hydraulically adjusted

controlled and hydraulically adjusted  
HYDRAULIC  
HYDRAULIC  
controlled and hydraulically adjusted

controlled and hydraulically adjusted  
HYDRAULIC  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
y controlled and hydraulically adjusted  
y controlled and hydraulically adjusted

HYDRAULIC  
HYDRAULIC

controlled and hydraulically adjusted

controlled and hydraulically adjusted

HYDRAULIC  
HYDRAULIC  
ND OUTLET CAMS 1 Lithium Ion 220 5 27 On-Board

HYDRAULIC  
HYDRAULIC

HYDRAULIC  
HYDRAULIC

controlled and hydraulically adjusted  
controlled and hydraulically adjusted  
controlled and hydraulically adjusted

LICALLY AND CONTROLLED ELECTRONICALLY  
AMS 1 NiMH 288 6 21.5 On-Board

ed (2) have occurred at this port, EGT greater than 400°C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

and 2) hand located at the center of the cylinder, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km/h.

Electrical Regen Brake	Both	Y
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## 1AC Induction

ed (2) have 3rd gear at this point, FGT gear after the 4th gear, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

ed (2) have been detected at this port, FGTs greater than 40°C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

ed (2) have not occurred at this port, EGT greater than 400°C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

ed (2) have 3 stages at this point, EGT greater than 400°C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

ed (2) have occurred at this port, EGT greater than 400°C, engine speed 930 to 3500 RPM, vehicle speed greater than 25 km

Electrical BRAKE PEDAL TRIGGERED REGENERATIVE  
Regen Brake Hold Mode

1Other

Other BRAKE PEDAL TRIGGERED REGENERATIVE HYDRAULIC MECHANICAL BRAKE SYSTEM 1Other



Motor	Ger	Rated Mo	Fuel Mete	Fuel Mete	Fuel Mete	Fuel Mete	Cell V	Off Board	Camless V.	Oil Viscosi
h		40	GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			CRDI		Common Rail	Direct Diesel Injection	Non		5W40	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignit		N		5W40 VW	
h		40	GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			CRDI		Common Rail	Direct Diesel Injection	Non		5W30 VW 50700	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W30 VW 50400 /	
			GDI		Spark Ignition	Direct Injection	N		5W30 VW 50400 /	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignition	Direct Injection	N		5W40 VW 50200	
			GDI		Spark Ignit		N		5W40 VW	
			h		40	MFI		Multipoint	N	
GDI		Spark Ignit					N		5W30 VW	
MFI		Multipoint/Sequential fuel inject				Non		5W30 VW 504 00		
MFI		Multipoint/Sequential fuel inject				Non		5W30 VW 504 00		
GDI		Spark Ignition Direct Injection				N		5W30 VW 50400 /		
MFI		Multipoint/Sequential fuel inject				Non		5W30 VW 504 00		
MFI		Multipoint/Sequential fuel inject				Non		5W30 VW 504 00		
MFI		Multipoint/Sequential fuel inject				Non		5W30 VW 504 00		

### 3 PHASE PERMANENT MAGNET

### 3 PHASE CURRENT PERM. MAGNET

MFI	Multipoint/sequential fuel inject	N	5W30 VW 504 00
MFI	Multipoint/sequential fuel inject	N	0W40 / VW50200
MFI	Multipoint/sequential fuel inject	N	10W60 VW 50101
MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
MFI	Multipoint/sequential fuel inject	N	5W30 VW 50400 /
GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
GDI	Spark Ignit	N	10W60 VW
GDI	Spark Ignition Direct Injection	N	10W60 VW 50101
GDI	Spark Ignit	N	10W60 VW
GDI	Spark Ignit	N	5W40 VW
CRDI	Common FN	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignition Direct Injection	N	5W-40 VW50200
GDI	Spark Ignition Direct Injection	N	5W40 / VW50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignit	N	5W40
GDI	Spark Ignit	N	5W40
GDI	Spark Ignit	N	5W40
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
MFI	Multipoint/sequential fuel inject	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignit	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W40
CRDI	Common Rail Direct Diesel Inject	N	5W40
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
CRDI	Common Rail Direct Diesel Inject	N	5W40 VW 50501
CRDI	Common Rail Direct Diesel Inject	N	5W40 VW 50501
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
MFI	Multipoint/sequential fuel inject	N	10W40 / VW5020
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
CRDI	Common Rail Direct Diesel Inject	N	5W30 VW 50700
GDI	Spark Ignition Direct Injection	N	5W40 VW 50200
GDI	Spark Ignit	N	5W40 VW 50200

Stop/Start Stop/Start Trans in FE Trans as I Model Typ Charge De Charge De Charge Su Charge Su EPA Calcul

N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Auto(AM-S6)	Auto(AM-S6)
N	No	Manual(M6)	Manual(M6) 3 frt manual
N	No	Auto(AM-S6)	Auto(AM-S6) 3 quattro
N	No	Auto(AV-S8)	Auto(AV-S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AV-S8)	Auto(AV-S8) Audi A6 CVT
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi A6 quattro
Y	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
Y	Yes	Auto(S8)	Auto(S8)
Y0700	Yes	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8)
N	No	Auto(S8)	Auto(S8) Audi Q7
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
N	No	Manual(M6)	Manual(M6)
N	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(AM-S7)	Auto(AM-S7)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe quattro
N	No	Auto(AM-S6)	Auto(AM-S6) Coupe c
N	No	Manual(M6)	Manual(M6) TTRS
N	No	Auto(S6)	Auto(S6)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)
Y0700	No	Auto(S8)	Auto(S8)
N	No	Auto(S6)	Auto(S6)
N	No	Auto(S8)	Auto(S8)

N	No	Auto(S6) Auto(S6)
<del>N</del> W50500	No	Auto(S8) Auto(S8)
<del>N</del> 50500	No	Auto(AM-S7) Auto(AM-S7)
<del>Y</del> 0700	Yes	Auto(AM-S7) Auto(AM-S7)
<del>Y</del> 0700	Yes	Auto(AM-S7) Auto(AM-S7)
<del>N</del> 50500	No	Auto(AM-S6) Auto(AM-S6)
<del>N</del> 50500	No	Manual(M6) Manual(M6) Gallardo C
<del>N</del> 50500	No	Auto(AM-S6) Auto(AM-S6)
<del>N</del> 50500	No	Manual(M6) Manual(M6) Gallardo S
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6)
<del>N</del>	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) C M6
N	No	Auto(S6) Auto(S6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Jetta Base
N	No	Manual(M5) Manual(M5)
N	No	Manual(M6) Manual(M6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S7) Auto(AM-S7)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6) Jetta SportWagen M6
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Manual(M6) Manual(M6)
<del>N</del>	No	Auto(S6) Auto(S6)
<del>N</del>	No	Manual(M5) Manual(M5)
N	No	Auto(AM-S6) Auto(AM-S6)
N	No	Auto(S6) Auto(S6) Tiguan front
N	No	Manual(M6) Manual(M6)
N	No	Auto(S6) Auto(S6)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8)
N	No	Auto(S8) Auto(S8) Touareg Hybrid

Product	Model	Year	EPA Calculated Gas GEZ Rating	GHG Rating	#1 Smog R	#1 Mfr Sm	#1 EPA Sm	SmartWay
		30.8		6	6 DAD XV02.03PA	7		
		46.2		9	8 DVW XV02.0U5N	5		
		30.4		6	6 DAD XV02.03PA	7		
		30.9		6	6 DAD XV02.03UA	5		
		35.2		7	7 DAD XV02.03UB	5		
		30.8		6	6 DAD XV02.03UB	5		
		30.9		6	6 DAD XJ02.0FUB	5		
		33.2		7	7 DAD XV02.03UB	5		
		35.2		7	7 DAD XV02.03UB	5		
		30.8		6	6 DAD XV02.03UB	5		
		30.9		6	6 DAD XJ02.0FUB	5		
		30.8		6	6 DAD XV02.03UB	5		
		30.9		6	6 DAD XJ02.0FUB	5		
		33.2		7	7 DAD XV02.03UB	5		
		36.9		7	7 DAD XV02.03UB	5		
		30.8		6	6 DAD XV02.03UB	5		
		28.1		5	5 DAD XJ03.03UF	5		
		27.5		5	5 DAD XJ03.03UF	5		
		27.5		5	5 DAD XJ03.03UF	5		
		27.1		5	5 DAD XV04.03UJ	5		
		27.5		5	5 DAD XJ03.03UF	5		
		24.4		4	4 DAD XV04.03UJ	5		
		19.3		3	3 DVW XV06.3UA8	5		
		29.5		6	6 DAD XJ02.0FUB	5		
		29.5		6	6 DAD XV02.03UB	5		
		28.8		6	6 DAD XT02.04UB	5		
		29.6		6	6 DAD XJ02.0FUB	5		
		27.2		5	5 DAD XJ03.03UF	5		
		34		7	7 DAD XT02.0HUB	5		
		28.1		5	4 DAD XT03.03UG	5		
		22.9		4	4 DAD XT03.0TLF	5		
		23		4	4 DAD XV04.23UL	5		
		22.6		4	4 DAD XV04.23UL	5		
		26.9		5	5 DAD XJ03.03UF	5		
		23.5		5	5 DAD XJ03.03UF	5		
		26.9		5	5 DAD XJ03.03UF	5		
		23.5		5	5 DAD XJ03.03UF	5		
		26.4		5	5 DAD XJ03.03UF	5		
		25.5		5	5 DAD XV04.03UJ	5		
		25.5		5	5 DAD XV04.03UJ	5		
		23.6		4	4 DAD XV04.03UJ	5		
		33.3		7	7 DAD XV02.03UA	5		
		33.3		7	7 DAD XV02.03UA	5		
		25.6		5	5 DAD XV02.03UA	5		
		17.2		2	2 DBEXV06.0501	5		
		23.6		4	4 DAD XV04.03UJ	5		
		17.4		2	2 DBEXV06.0501	5		
		19.4		3	3 DBEXV06.04UC	5		
		21.8		4	4 DAD XV04.03UJ	5		
		17.2		2	2 DBEXV06.0501	5		
		18.2		3	3 DBEXV06.04UC	5		

17.4		2	2 DBEXV06.0501	5
15.9		2	2 DBEXV06.84LA	5
12.6		1	1 DBGTV08.0V16	5
16.4		2	2 DNLXV06.5L83	5
14.5		1	1 DNLXV06.5L83	5
19.4		3	3 DADXV05.2LR8	5
17.4		3	3 DADXV05.	5
19.3		3	3 DADXV05.2LR8	5
16.1		2	2 DADXV05.	5
31.8		6	6 DVWXV02.	7
43.7		8	7 DVWXV02.	5
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
31.6		6	6 DVWXV02.5A59	7
31.9		6	6 DVWXV02.5M59	7
31.5		6	6 DVWXV02.03PA	7
43.4		8	7 DVWXV02.0U5N	5
30.7		6	6 DVWXV02.03PA	7
30.3		6	6 DVWXV02.5A59	7
32.3		6	6 DVWXV02.03PA	7
31.8		6	6 DVWXV02.03PA	7
25.8		5	5 DVWXV03.6U46	5
24.8		5	5 DVWXV03.6U46	5
32.4		6	6 DVWXV02.03SA	5
46.2		9	8 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
28.5		5	5 DADXV02.03UA	5
34.8		7	7 DADXV02.03PA	7
31.2		6	6 DADXV02.03PA	7
35		7	7 DVWXV02.03PA	7
46.2		9	8 DVWXV02.0U5N	5
32.9		6	6 DVWXV02.0U36	5
34.7		7	7 DVWXV02.0U36	5
32.6		7	7 DVWXV02.03PA	7
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
59.4		10	10 DVWXV01.4PHE	7
44.2		8	7 DVWXV02.0U5N	5
46		9	8 DVWXV02.0U5N	5
33.1		7	7 DVWXV02.5A59	7
32.2		7	7 DVWXV02.5M59	7
44.6		9	8 DVWXV02.0U4S	5
46.4		9	8 DVWXV02.0U4S	5
31.9		6	6 DVWXV02.5A59	7
31.7		7	7 DVWXV02.5M59	7
28.5		6	6 DVWXV03.6U41	5
29.9		6	6 DVWXJ02.03UA	5
26.4		5	5 DVWXJ02.03UA	5
29.6		6	6 DVWXJ02.03UA	5
23.3		6	5 DADXT03.02UG	5
25		4	4 DVWXT03.6U76	5
28.2		5	5 DVWXT03.0HEV	5

Signal 10 Pull #56 Test #6 for Test Group A) #3 Smog R #3 Mfr Sm #3 EPA Sm SmartWay #4 Smog R #4 Mfr Sm

DVWXJ02.03UA 5

DVWXJ02.03UA 5  
DVWXV02.5U3A 5  
DVWXV02.5U3M 5  
DVWXJ02.03UA 5

DVWXJ02.03UA 5  
DVWXV02.5U3A 5  
DVWXJ02.03UA 5  
DVWXJ02.03UA 5

DVWXV02.5U3A 5  
DVWXV02.5U3M 5

DADXV02.03UA 5  
DADXV02.03UA 5  
DVWXJ02.03UA 5

DVWXJ02.03UA 5

DVWXV02.5U3A 5  
DVWXV02.5U3M 5

DVWXV02.5U3A 5  
DVWXV02.5U3M 5

DVWXV02.5U3A 5  
DVWXV02.5U3M 5



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	8650	768	469	633
	10400	840	501	688
	16900	1050	599	847
	10400	836	481	676
	12150	902	547	742
	6150	657	447	562
	7400	734	511	634
	6150	660	446	564
	8650	768	452	626
100		401	291	351
2600		354	262	313
2600		365	250	313
	400	430	298	371
850		396	310	358
850		408	289	354
	400	421	310	371
2600		365	250	313
	400	430	298	371
100		418	329	378
100		403	283	349
100		425	279	360
	1900	507	334	429
	2650	523	351	446
100		405	257	338
3100		340	245	297
3100		342	243	297
1350		374	286	334
1350		388	271	335
	1400	460	330	401
1100		379	271	331
100		416	287	358
1100		372	280	331
3100		340	245	297
850		381	299	344
2100		361	262	316
600		403	272	344
3100		342	243	297
1350		374	286	334
1350		388	271	335
4850		219	194	208
2850		352	258	310
3100		342	243	297
1350		374	286	334
1350		388	271	335
3100		331	240	290
3350		330	239	289
850		401	289	351
1350		391	275	339
	900	449	319	390
	900	430	341	390
	1900	484	336	417
	900	435	343	394
	900	517	351	442
	3400	520	391	462
	1900	447	372	413

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639	359	513	768	469	633.4
690	408	563.1	840.4	501	687.7
885	495	709.5	1050.2	598.8	847.1
705	353	546.6	836	481	676.2
771	418	612.2	902	547	742.2
552	349	460.6	657	447	562.5
635	370	515.8	734	511	633.6
556	348	462.4	660	446	563.7
681	391	550.5	768	452	625.8
334.3	211.2	278.9	401	290.6	351.3
272	184	232.4	354.3	261.8	312.7
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
323.7	227.6	280.5	396.3	310.3	357.6
335.2	207.2	277.6	407.6	288.8	354.1
332	220.9	282	421	310	371
281.3	175.3	233.6	365.3	250.1	313.5
350.8	214.6	289.5	430.3	298	370.8
335.4	235.6	290.5	418.2	329.4	378.2
327.2	207.7	273.4	402.8	282.7	348.8
346.3	202.5	281.6	425.2	279.3	359.5
419	253	344.3	506.7	333.8	428.9
434	265	358	523	351.1	445.6
321	213	272.4	404.7	256.6	338.1
259.8	171.2	219.9	339.8	244.6	297
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
372	240	312.6	459.5	330.5	401.4
295.1	203.2	253.7	379.2	271.3	330.6
340.4	215.5	284.2	415.9	287	357.9
300.9	196.7	254	372	280.4	330.8
259.8	171.2	219.9	339.8	244.6	297
315	214	269.6	381.3	298.8	344.2
307	192	255.2	360.5	262	316.2
333.9	197.2	272.4	403.3	271.8	344.1
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
161	137	150.2	219	193.9	207.7
270	181	230	351.9	257.7	309.5
261.7	170	220.4	342.1	242.9	297.5
315.6	208.9	267.6	373.9	285.6	334.2
336.4	199.4	274.8	388	270.9	335.3
268	179	228	331	240	290
266	162	219.2	330	239	289
328.2	217.8	278.5	400.9	289.4	350.7
339.6	206.8	279.8	391.3	275	339
372	238	311.7	449	319	390.5
339.6	244.4	296.8	429.9	341.3	390
407	248	335.4	484	336	417.4
343.6	246	299.7	434.6	343.5	393.6
422	248	343.7	517	351	442.3
416	281	355.2	520.1	390.6	461.8
354	267	314.8	446.9	371.8	413.1

City	State	Wounded to come to the aid of (miles)	DISTANCE	Comb Vol Higher	Final Label	EPA_FUEL	EPA_GHG	EPA_AMT
		N	4.2			4.2		
		N	2.9			2.9		
		N	4.2			4.2		
		N	4.2			4.2		
		N	3.8			3.8		
		N	4.2			4.2		
		N	4.2			4.2		
		N	3.8			3.8		
		N	3.8			3.8		
		N	4.2			4.2		
		N	4.2			4.2		
		N	4.2			4.2		
		N	3.8			3.8		
		N	3.6			3.6		
		N	4.2			4.2		
		N	4.5			4.5		
		N	4.8			4.8		
		N	4.8			4.8		
		N	4.8			4.8		
		N	4.8			4.8		
		N	5.3			5.3		
		N	6.2			6.2		
		N	4.3			4.3		
		N	4.3			4.3		
		N	4.3			4.3		
		N	4.3			4.3		
		N	4.8			4.8		
		N	3.8			3.8		
		N	4.5			4.5		
		N	5.6			5.6		
		N	5.6			5.6		
		N	5.6			5.6		
		N	4.8			4.8		
		N	5			5		
		N	4.8			4.8		
		N	5			5		
		N	4.8			4.8		
		N	5			5		
		N	5			5		
		N	5.3			5.3		
		N	3.8			3.8		
		N	3.8			3.8		
		N	5			5		
		N	7.1			7.1		
		N	5.6			5.6		
		N	7.1			7.1		
		N	6.7			6.7		
		N	5.9			5.9		
		N	7.1			7.1		
		N	6.7			6.7		

N	7.1	7.1
N	7.7	7.7
N	10	10
N	7.7	7.7
N	8.3	8.3
N	6.2	6.2
N	6.7	6.7
N	6.2	6.2
N	7.1	7.1
N	4	4
N	3.1	3.1
N	3.1	3.1
N	4.2	4.2
N	4	4
N	4	4
N	4.2	4.2
N	3.1	3.1
N	4.2	4.2
N	4.3	4.3
N	4	4
N	4	4
N	4.8	4.8
N	5	5
N	4	4
N	2.9	2.9
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	4.5	4.5
N	3.7	3.7
N	4	4
N	3.7	3.7
N	2.9	2.9
N	4	4
N	3.6	3.6
N	3.8	3.8
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.3	2.3
N	3	3
N	2.9	2.9
N	3.8	3.8
N	3.8	3.8
N	2.9	2.9
N	2.9	2.9
N	4	4
N	3.8	3.8
N	4.3	4.3
N	4.3	4.3
N	4.8	4.8
N	4.3	4.3
N	4.3	4.3
N	5.3	5.3
N	4.8	4.8

2017-FFP\_005490





[illegible]

[illegible]

mined)

















**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Wed 10/17/2012 1:23:27 PM  
**Subject:** Published Guide Information  
[winmail.dat](#)

Hi Dave;

Would you be so kind, to confirm that the 2013 fuel economy label, index 100, for the Volkswagen Jetta Hybrid is not included in the published fuel economy guide to be printed sometime in November.

As you also confirmed with our phone conversation, I understand that due to the November release date in Verify, this label index 100 will also not appear on the web fuel economy site either.

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

**To:** richard.thomas@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Wed 10/17/2012 4:19:41 PM  
**Subject:** Fw: 2013 Printed FE Guide - Did you remove the VW Jetta Hybrid from the Printed Guide?  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)  
[Oliver.Schmidt@vw.com](mailto:Oliver.Schmidt@vw.com)  
[Leonard.Kata@vw.com](mailto:Leonard.Kata@vw.com)  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

FYI

----- Forwarded by David Good/AA/USEPA/US on 10/17/2012 12:19 PM -----

**From:** "Bain, Debbie T." <baindt@ornl.gov>  
**To:** David Good/AA/USEPA/US@EPA  
**Cc:** "Hopson, Janet L." <hopsonjl@ornl.gov>  
**Date:** 10/17/2012 12:16 PM  
**Subject:** RE: 2013 Printed FE Guide - Did you remove the VW Jetta Hybrid from the Printed Guide?

Yes, it has been removed.

Debbie

**From:** Good.David@epamail.epa.gov [mailto:Good.David@epamail.epa.gov]  
**Sent:** Wednesday, October 17, 2012 11:20 AM  
**To:** Bain, Debbie T.  
**Cc:** Hopson, Janet L.  
**Subject:** 2013 Printed FE Guide - Did you remove the VW Jetta Hybrid from the Printed Guide?

Debbie,

VW wants to make sure that the 2013 Jetta Hybrid was removed from the Printed Guide.

Ex. 4 - CBI

Ex. 4 - CBI

Thanks

----- Forwarded by David Good/AA/USEPA/US on 10/17/2012 11:16 AM -----

**From:** "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
**To:** David Good/AA/USEPA/US@EPA  
**Cc:** "Schmidt, Oliver (EEO)" <Oliver.Schmidt@vw.com>, "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
**Date:** 10/17/2012 09:23 AM  
**Subject:** Published Guide Information

Hi Dave;

Would you be so kind, to confirm that the 2013 fuel economy label, index 100, for the Volkswagen Jetta Hybrid is not included in the published fuel economy guide to be printed sometime in November.

As you also confirmed with our phone conversation, I understand that due to the November release date in Verify, this label index 100 will also not appear on the web fuel economy site either.

Best regards,

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

[attachment "winmail.dat" deleted by David Good/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 10/19/2012 11:43:06 AM  
**Subject:** FW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates  
[Testinfo D3UG DAQ.pdf](#)  
[Vehicle Prep for EPA D3UG-DAQ.pdf](#)  
[carsten.stang@audi.de](mailto:carsten.stang@audi.de)  
[www.audi.com](http://www.audi.com)  
[carsten.stang@audi.de](mailto:carsten.stang@audi.de)  
[www.audi.com](http://www.audi.com)

Hi Jim,

As a follow up to your request yesterday, please advise if you need additional information for the stop/start instructions (please see the vehicle prep pdf file).

---

From: Stang, Carsten (N/EA-521)  
Sent: Friday, October 19, 2012 5:19 AM  
To: Giles, Michael (EEO)  
Cc: Rodgers, William (EEO); Schuetze, Michael (N/EA-521)  
Subject: AW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Hi Mike,

Please find attached the test information and vehicle preparation instructions that I prepared for the confirmatory testing of the D4 TDI:

The vehicle preparation instructions are more or less the same that we provided with the D4 4.0T in May. As we had no trouble back then these information should be sufficient this time, too.

Please call me in case you have any comments or ideas to improve the instructions.

Thanks and regards,  
Carsten

Mit freundlichen Grüßen  
Best regards

Carsten Stang  
Aggregatezulassung Neckarsulm  
Emission Certification

AUDI AG  
N/EA-521  
D-74148 Neckarsulm  
Tel.: +49-7132-31-4009  
Mobil (BIK): +49-7132-31-742417  
[carsten.stang@audi.de](mailto:carsten.stang@audi.de)  
[www.audi.com](http://www.audi.com)

Sitz/Domicile: Ingolstadt

Registergericht/Court of Registry: Amtsgericht Ingolstadt

HRB Nr./Commercial Register No.: 1

Vorsitzender des Aufsichtsrats/Chairman of the Supervisory Board: Martin Winterkorn

Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Luca de Meo, Frank Dreves, Wolfgang Dürheimer, Bernd Martens, Thomas Sigi, Axel Strotbek

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---

Von: Giles, Michael (EEO)

Gesendet: Donnerstag, 18. Oktober 2012 22:31

An: Stang, Carsten (N/EA-521)

Cc: Rodgers, William (EEO)

Betreff: RE: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Hi Carsten,

Just to pass along a request from EPA for the A8 testing - Our cert representative asked if you could provide (along with the usual instructions for testing) the following specific piece of information:

Explanation of operation of stop/start system (including pictures of the dash with examples of stop/start both on and off shown) so that it is clear to the driver how to use the system, and when it is active / inactive.

See you Monday!

Mike

---

From: Stang, Carsten (N/EA-521)

Sent: Tuesday, September 25, 2012 8:21 AM

To: Rodgers, William (EEO); Thomas, Richard (EEO)

Cc: Giles, Michael (EEO); Freudenberger, Moritz (N/EA-631)

Subject: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Hello Bill, Hello Richard,

Please find attached the weights that we need to adjust the mass of the D4:

<< File: Gewichte\_D3UG-DAQ.pdf >>

Unfortunately it's German but it should be quite easy to understand J

Just in case you're interested in my flight schedule:

<< Message: WG: Reisebestätigung für: STANG /CARSTEN . Abreise 19 Oktober 2012,YZTR7Y >>

As we already talked about I'll be arriving on Saturday Oct 20th and Moritz Freudenberger and myself will check and prepare the car on Sunday Oct 21st.

You don't necessarily have to be there on Sunday, I think it should be enough to have access to the EEO office.

Do we need to fill out an access request again or is the old one still valid?

Anyway, can you please send me us access request for Moritz Freudenberger?

I think Moritz Freudenberger will leave on Wednesday or Thursday. I'll fly to LA on Saturday Oct 27th because we have an OBD-meeting on Oct 30th.

Regards,  
Carsten

Mit freundlichen Grüßen  
Best regards

Carsten Stang  
Aggregatezulassung Neckarsulm  
Emission Certification

AUDI AG  
N/EA-521  
D-74148 Neckarsulm  
Tel.: +49-7132-31-4009  
Mobil (BIK): +49-7132-31-742417  
carsten.stang@audi.de  
www.audi.com

Sitz/Domicile: Ingolstadt  
Registergericht/Court of Registry: Amtsgericht Ingolstadt  
HRB Nr./Commercial Register No.: 1  
Vorsitzender des Aufsichtsrats/Chairman of the Supervisory Board: Martin Winterkorn  
Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Luca de Meo, Frank Dreves, Wolfgang Dürheimer, Bernd Martens, Thomas Sigi, Axel Strotbek

Wichtiger Hinweis: Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail zu.

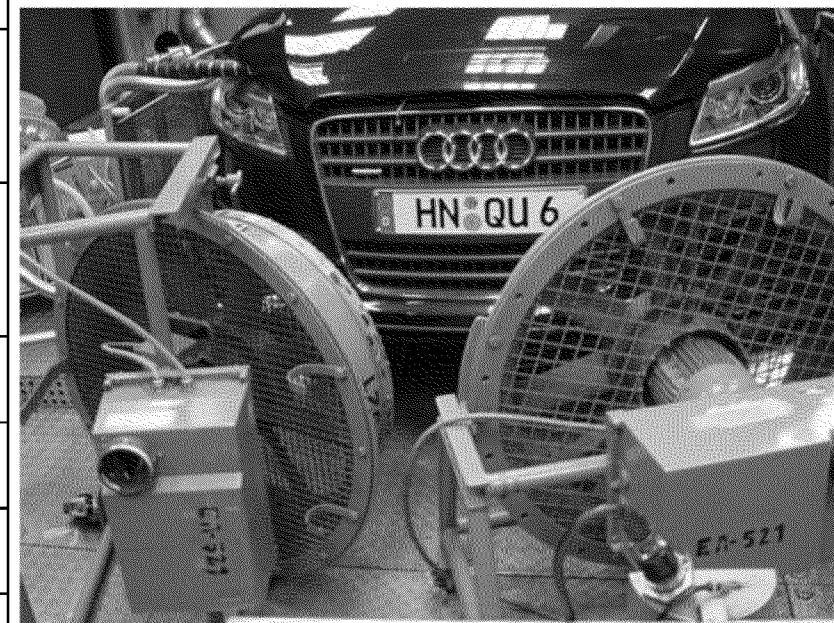
Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon AUDI AG.



# Test Information



Vehicle ID: D3UG-DAQ	Testversion 1
Equivalent Test Weight (lbs)	4750
Road Track Coefficients (lb f ; lb f/mph ; lb f/ mph^2)	39.791 / 0.36172 / 0.014957
Dyno Set Coefficients (lb f ; lb f/mph ; lb f/ mph^2)	-11.510 / 0.18809 / 0.013328
40 % Fuel Fill (gal)	9.5 (36l)
Design Curb Weight * (lbs)	4563
Front Axle (lbs) / Rear Axle (lbs)	2480 / 2083
Road Tire Pressure: Front (psi) / Rear (psi)	39 / 38
Precon. Evap.-Canister	Loading 2 Day
<b><u>All Wheel Drive</u></b>	



\* Weight adjustment: a total of 136 lbs (61 kg). 32 lbs in the passenger legroom positioned close to the bulkhead. 62 lbs on the left side of the rear legroom positioned close to the rear seat. 42 lbs on the right side of the rear legroom positioned close to the rear seat

# Vehicle ID: D3UG – DAQ

## Handling / Starting Instructions:

- If the engine is off the transmission locks in „P“ position. To unlock the transmission to move the car on the dyno you have to pull the lever on the driver side leg room. The lever can be secured with the small aluminum bar. If the car is well positioned on the dyno you have to push the lever back to the ground. Please ensure that the button is pushed back to the ground before starting the test.
- To avoid any warning messages the hood has to be closed. Therefore both hood locks have to be closed manually.
- The car is equipped with a keyless go system. Therefore the key has to be inside the car and has to be positioned close to the driver. Without applying the brake pedal push “Engine Start / Stop”-button once till ignition is on (see 26 of attached picture). To start the engine you have to apply the brake pedal and push the “Engine Start / Stop”-button a second time till the engine cranks. Thereafter release the button. Now with the engine running the transmission can be shifted by drawing back the gearshift lever. Be careful that the transmission is in „D“ position indicated by a „D“ on the instrument panel.

## Location of Fuel Tank Drain Hoses:

- In the passenger compartment (right and left rear leg room)

## Location of Fuel Filler Door Release:

- Simply push the fuel filler door (right side of the vehicle) on the rear center of the flap for release

## Traction Control:

- As the car will be tested as four wheel drive no action is necessary

## Fan Placement:

- 2 Fans central in front of the car as approved by administrator, for reference see Test information sheet.

## Start/Stop System

- The car is equipped with a start/stop system that can be activated / deactivated by the driver. The system always uses the last mode of operation that was selected by the driver (last mode functionality). The system can be switched on / off by pressing the start-stop-button on the dashboard (see 19 of attached picture). A deactivated system is indicated by a LED integrated into the start-stop-button. Please ensure that the system is switched off before starting the test. Therefore the start-stop-button has to be illuminated.



19  **Start-Stop-System**

26 **Start Engine**



**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Fri 10/19/2012 2:49:24 PM  
**Subject:** Re: FW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates  
[carsten.stang@audi.de](mailto:carsten.stang@audi.de)  
[www.audi.com](http://www.audi.com)  
[carsten.stang@audi.de](mailto:carsten.stang@audi.de)  
[www.audi.com](http://www.audi.com)

Thanks, I passed it on to the lab.

BTW, I found this today. Lots of pics of the new Oxnard facility.

<http://www.autoblog.com/2012/10/18/an-inside-look-at-vws-new-california-randd-center/>

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 10/19/2012 07:44 AM  
**Subject:** FW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Hi Jim,

As a follow up to your request yesterday, please advise if you need additional information for the stop/start instructions (please see the vehicle prep pdf file).

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**From:** Stang, Carsten (N/EA-521)  
**Sent:** Friday, October 19, 2012 5:19 AM  
**To:** Giles, Michael (EEO)  
**Cc:** Rodgers, William (EEO); Schuetze, Michael (N/EA-521)  
**Subject:** AW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Hi Mike,

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The vehicle preparation instructions are more or less the same that we provided with the D4 4.0T in May. As we had no trouble back then these information should be sufficient this time, too.

Please call me in case you have any comments or ideas to improve the instructions.

Thanks and regards,  
Carsten

Mit freundlichen Grüßen  
Best regards

Carsten Stang  
Aggregatzulassung Neckarsulm  
Emission Certification

AUDI AG  
N/EA-521  
D-74148 Neckarsulm  
Tel.: +49-7132-31-4009  
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carsten.stang@audi.de  
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Von: Giles, Michael (EEO)  
Gesendet: Donnerstag, 18. Oktober 2012 22:31  
An: Stang, Carsten (N/EA-521)  
Cc: Rodgers, William (EEO)  
Betreff: RE: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

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Explanation of operation of stop/start system (including pictures of the dash with examples of stop/start both on

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See you Monday!

Mike

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Cc: Giles, Michael (EEO); Freudenberger, Moritz (N/EA-631)  
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Hello Bill, Hello Richard,

Please find attached the weights that we need to adjust the mass of the D4:

<< File: Gewichte\_D3UG-DAQ.pdf >>

Unfortunately it's German but it should be quite easy to understand J

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<< Message: WG: Reisebestätigung für: STANG /CARSTEN . Abreise 19 Oktober 2012,YZTR7Y >>

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Anyway, can you please send me us access request for Moritz Freudenberger?

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2017-FFP 005515



Wysor/AA/USEPA/US@EPA;"Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; aul  
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[Domenic.Rist@audi.de]; ad Wysor/AA/USEPA/US@EPA;"Rist, Domenic (I/EA-523)"  
[Domenic.Rist@audi.de]; Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; Rech,  
Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]  
**Cc:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Johnson, Stuart (EEO)"  
[Stuart.Johnson@vw.com]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Sat 10/20/2012 2:48:29 PM  
**Subject:** Volkswagen Group Meetings with USEPA  
[00 Draft Agenda EPA Cert-Test.pdf](#)  
[00 Draft Agenda Tier3.pdf](#)

To all:

The Volkswagen Group has two meeting scheduled with EPA on Monday October 29, 2012.

At this time, I am writing to forward the attached copies of both agendas for your reference and planning.

1. The first meeting involves certification, test procedure, and labeling topics and our primary EPA contact is Jim Snyder. The meeting takes place from 1:00 – 3:00 p.m.
2. The second meeting addresses "Tier 3" topics, and our primary EPA contact is Michael Olechiw. The meeting takes place from 4:00 to 5:00 p.m.

We look forward to seeing you in Ann Arbor on the 29th.

Best regards,

Len

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Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

2017-FFP 005518

Wysor/AA/USEPA/US@EPA;"Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; aul  
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[Domenic.Rist@audi.de]; ad Wysor/AA/USEPA/US@EPA;"Rist, Domenic (I/EA-523)"  
[Domenic.Rist@audi.de]; Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; Rech,  
Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]  
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**Cc:** CN=Ben Haynes/OU=AA/O=USEPA/C=US@EPA[]  
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**Sent:** Mon 10/22/2012 6:11:02 PM  
**Subject:** Re: FW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates  
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[attachment "Testinfo D3UG\_DAQ.pdf" deleted by Jim Snyder/AA/USEPA/US] [attachment "Vehicle Prep for EPA D3UG-DAQ.pdf" deleted by Jim Snyder/AA/USEPA/US]

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 10/22/2012 6:59:43 PM  
**Subject:** Diesel nozzle

Hi Jim,

I received your messages and we talked to Ben, who indicated that the filling issue should be resolved.

Please let me know if there are further issues.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

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**To:** "Giles, Michael (EEO)" <michael.giles@vw.com>, [carsten.stang@audi.de](mailto:carsten.stang@audi.de)  
**Cc:** Ben Haynes/AA/USEPA/US@EPA  
**Date:** 10/22/2012 02:11 PM  
**Subject:** Re: FW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

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Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** Jim Snyder/AA/USEPA/US  
**To:** "Giles, Michael (EEO)" <michael.giles@vw.com>, carsten.stang@audi.de  
**Cc:** Ben Haynes/AA/USEPA/US@EPA  
**Date:** 10/22/2012 02:11 PM  
**Subject:** Re: FW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Mike, Carsten, the lab is having trouble fueling the vehicle due to a flapper door blocking the fuel nozzle. it doesn't seem to retract with our nozzle. Any trick to it? Please call me or if I'm not there, call Ben at 214-4261.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 10/19/2012 07:44 AM  
**Subject:** FW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Hi Jim,

As a follow up to your request yesterday, please advise if you need additional information for the stop/start instructions (please see the vehicle prep pdf file).



---

From: Stang, Carsten (N/EA-521)  
Sent: Friday, October 19, 2012 5:19 AM  
To: Giles, Michael (EEO)  
Cc: Rodgers, William (EEO); Schuetze, Michael (N/EA-521)  
Subject: AW: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Hi Mike,

Please find attached the test information and vehicle preparation instructions that I prepared for the confirmatory testing of the D4 TDI:

The vehicle preparation instructions are more or less the same that we provided with the D4 4.0T in May. As we had no trouble back then these information should be sufficient this time, too.

Please call me in case you have any comments or ideas to improve the instructions.

Thanks and regards,  
Carsten

Mit freundlichen Grüßen  
Best regards

Carsten Stang  
Aggregatezulassung Neckarsulm  
Emission Certification

AUDI AG  
N/EA-521  
D-74148 Neckarsulm  
Tel.: +49-7132-31-4009  
Mobil (BIK): +49-7132-31-742417  
carsten.stang@audi.de  
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Sitz/Domicile: Ingolstadt  
Registergericht/Court of Registry: Amtsgericht Ingolstadt  
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---

Von: Giles, Michael (EEO)  
Gesendet: Donnerstag, 18. Oktober 2012 22:31  
An: Stang, Carsten (N/EA-521)  
Cc: Rodgers, William (EEO)  
Betreff: RE: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Hi Carsten,

Just to pass along a request from EPA for the A8 testing - Our cert representative asked if you could provide (along with the usual instructions for testing) the following specific piece of information:

Explanation of operation of stop/start system (including pictures of the dash with examples of stop/start both on and off shown) so that it is clear to the driver how to use the system, and when it is active / inactive.

See you Monday!

Mike

---

From: Stang, Carsten (N/EA-521)  
Sent: Tuesday, September 25, 2012 8:21 AM  
To: Rodgers, William (EEO); Thomas, Richard (EEO)  
Cc: Giles, Michael (EEO); Freudenberger, Moritz (N/EA-631)  
Subject: EPA Confirmatory Testing D4 3.0 TDI CW43: weights + flight dates

Hello Bill, Hello Richard,

Please find attached the weights that we need to adjust the mass of the D4:

<< File: Gewichte\_D3UG-DAQ.pdf >>

Unfortunately it's German but it should be quite easy to understand J

Just in case you're interested in my flight schedule:

<< Message: WG: Reisebestätigung für: STANG /CARSTEN . Abreise 19 Oktober 2012,YZTR7Y >>

As we already talked about I'll be arriving on Saturday Oct 20th and Moritz Freudenberger and myself will check and prepare the car on Sunday Oct 21st.

You don't necessarily have to be there on Sunday, I think it should be enough to have access to the EEO office.

Do we need to fill out an access request again or is the old one still valid?

Anyway, can you please send me us access request for Moritz Freudenberger?

I think Moritz Freudenberger will leave on Wednesday or Thursday. I'll fly to LA on Saturday Oct 27th because we have an OBD-meeting on Oct 30th.

Regards,  
Carsten

Mit freundlichen Grüßen  
Best regards

Carsten Stang  
Aggregatezulassung Neckarsulm  
Emission Certification

AUDI AG  
N/EA-521  
D-74148 Neckarsulm  
Tel.: +49-7132-31-4009  
Mobil (BIK): +49-7132-31-742417  
carsten.stang@audi.de  
www.audi.com

Sitz/Domicile: Ingolstadt  
Registergericht/Court of Registry: Amtsgericht Ingolstadt  
HRB Nr./Commercial Register No.: 1  
Vorsitzender des Aufsichtsrats/Chairman of the Supervisory Board: Martin Winterkorn  
Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Luca de Meo, Frank Dreves, Wolfgang  
Dürheimer, Bernd Martens, Thomas Sigi, Axel Strotbek

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Rückschlüsse auf den Rechtscharakter der E-Mail zu.  
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AG.

[attachment "Testinfo D3UG\_DAQ.pdf" deleted by Jim Snyder/AA/USEPA/US] [attachment "Vehicle Prep for EPA  
D3UG-DAQ.pdf" deleted by Jim Snyder/AA/USEPA/US]

**To:** Verify Help Desk [verifyhelp@csc.com]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 10/23/2012 8:29:17 PM  
**Subject:** Please help with email problem - repeated test waiver notices.  
[image001.png](#)  
[here](#)

I was in my Audi inbox today (login Ex. 6) and noticed dozens (if not hundreds?) of repeated messages to notify of test waiver. There should have been only one message for each of 2 configurations.

The emails started on 10/18 and are still coming at a rate of a few per hour.

Here is text from one example:

- From: Verify Administrator
- Date: 10/21/2012 1:50:15 AM

Confirmatory Test for the following Vehicle has been Waived: Manufacturer: ADX Vehicle ID: DAV 558  
Vehicle Configuration: 0

Vehicle ID: DAV 558

Vehicle Configuration #: 0

Test Group Name: DAD XV05.2LR8

Transaction Identifier: \_e48ab268-7123-4026-acc7-def060e6ea67

Click [here](#) to view the status history.

Thank you for submitting your request to Verify via CDX.

Also here is a screen shot of my inbox when it started (and continues through today). I am sure it is still running. Please assist... Thank you in advance!

[IMAGE]

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207





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Logged in as **Ex. 6** (Log out)

## Central Data Exchange

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Last Login: 10/23/2012 1:52:49 PM

[MyCDX](#) [Inbox \(715\)](#) [My Profile](#) [Submission History](#)

1207 items found; displaying 221 to 240.

Page 12 of 61

<input type="checkbox"/>	From	Subject	Received
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 1)	10/19/2012 12:26:22 AM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 0)	10/19/2012 12:15:50 AM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 1)	10/18/2012 11:25:34 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 0)	10/18/2012 11:14:34 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 1)	10/18/2012 10:23:13 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 0)	10/18/2012 10:13:15 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 1)	10/18/2012 9:11:28 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 0)	10/18/2012 9:10:13 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 1)	10/18/2012 8:10:35 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 0)	10/18/2012 8:09:01 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 1)	10/18/2012 7:09:49 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 0)	10/18/2012 7:08:15 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 1)	10/18/2012 6:09:12 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 0)	10/18/2012 6:07:36 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 1)	10/18/2012 5:08:35 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 0)	10/18/2012 5:06:56 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 1)	10/18/2012 4:08:00 PM
<input type="checkbox"/>	Verify Administrator	Submission accepted for your file upload CBI_8AD XV02.0366_APP_F06_R00.pdf	10/18/2012 4:06:54 PM
<input type="checkbox"/>	Verify Administrator	Confirmatory Test Waived (DAV 558 / 0)	10/18/2012 4:06:22 PM
<input type="checkbox"/>	Verify Administrator	Submission accepted for your file upload CBI_7AD XV02.0366_APP_F20_R00.pdf	10/18/2012 4:04:25 PM

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** Ex. 6  
**Sent:** Tue 10/23/2012 9:49:59 PM  
**Subject:** Re: Please help with email problem - repeated test waiver notices. (HLP-3073)

Hello Mr. Giles,

Verify help desk ticket HLP-3073 was opened for your inquiry.

Please check your inbox to see if the "Confirmatory Test Waived (DAV 558/0)" notifications have stopped now. Also, will you please send the transaction id in the "Confirmatory Test Waived (DAV 558/1)" notification?

**Ex. 6**

Verify Help Desk  
Staffed by Computer Sciences Corporation,  
Contractor to the Environmental Protection Agency

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"Giles, Michael  
(EEO)"  
<michael.giles@vw.com> To  
Verify Help Desk@CSC  
cc  
10/23/2012 04:29 PM "Jim Snyder  
(Snyder.Jim@epamail.epa.gov)"  
<Snyder.Jim@epamail.epa.gov>  
Subject  
Please help with email problem -  
repeated test waiver notices.



I was in my Audi inbox today (login: Ex. 6) and noticed dozens (if not hundreds?) of repeated messages to notify of test waiver. There should have been only one message for each of 2 configurations.

The emails started on 10/18 and are still coming at a rate of a few per hour.

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- Date: 10/21/2012 1:50:15 AM

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Vehicle ID: DAV 558

Vehicle Configuration #: 0

Test Group Name: DAD XV05.2LR8

Transaction Identifier: \_e48ab268-7123-4026-acc7-def060e6ea67

[Click here to view the status history.](#)

Thank you for submitting your request to Verify via CDX.

Also here is a screen shot of my inbox when it started (and continues through today). I am sure it is still running. Please assist... Thank you in advance!

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207





**To:** Verify Help Desk [verifyhelp@csc.com]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 10/24/2012 11:56:01 AM  
**Subject:** RE: Please help with email problem - repeated test waiver notices. (HLP-3073)

Thanks, the Config 0 emails have stopped.

Here is the ID for #1: Transaction Identifier: \_217021d8-e37f-4407-9caf-edf10d8ffcc

-----Original Message-----

From: [Ex. 6]@csc.com] On Behalf Of Verify Help Desk  
Sent: Tuesday, October 23, 2012 5:50 PM  
To: Giles, Michael (EEO)  
Cc: Snyder.Jim@epamail.epa.gov  
Subject: Re: Please help with email problem - repeated test waiver notices. (HLP-3073)

Hello Mr. Giles,

Verify help desk ticket HLP-3073 was opened for your inquiry.

Please check your inbox to see if the "Confirmatory Test Waived (DAV 558/0)" notifications have stopped now. Also, will you please send the transaction id in the "Confirmatory Test Waived (DAV 558/1)" notification?

[Ex. 6]

Verify Help Desk  
Staffed by Computer Sciences Corporation, Contractor to the Environmental Protection Agency

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

"Giles, Michael  
(EEO)"  
<michael.giles@vw To  
.com> Verify Help Desk@CSC  
cc  
10/23/2012 04:29 "Jim Snyder  
PM (Snyder.Jim@epamail.epa.gov)"  
<Snyder.Jim@epamail.epa.gov>  
Subject  
Please help with email problem -

repeated test waiver notices.

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- Date: 10/21/2012 1:50:15 AM

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ADX Vehicle ID: DAV 558 Vehicle Configuration: 0

Vehicle ID: DAV 558

Vehicle Configuration #: 0

Test Group Name: DAD XV05.2LR8

Transaction Identifier: \_e48ab268-7123-4026-acc7-def060e6ea67

[Click here to view the status history.](#)

Thank you for submitting your request to Verify via CDX.

Also here is a screen shot of my inbox when it started (and continues through today). I am sure it is still running. Please assist... Thank you in advance!

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 10/25/2012 3:23:43 PM  
**Subject:** Re: Volkswagen Alternate Canister Loading Procedure  
[alternate canister loading approval.pdf](#)

Len, The requested alternate canister loading procedure for vehicles with non-integrated refueling systems is essentially the same as that already approved for Hybrid vehicles with non-integrated systems. The procedure has sound engineering basis. Part 86.132-96 (n) allows Administrative approval of this alternative loading method.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 09/27/2012 06:35 PM  
Subject: Volkswagen Alternate Canister Loading Procedure

Hello Jim:

Attached is an advance copy of our formal request for approval of the Volkswagen alternate canister loading procedure. This was the subject of our meeting on September 20, 2012. I will also submit an electronic version ASAP.

Thanks again for meeting with us.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

[attachment "Canister Loading Procedure.pdf" deleted by Jim Snyder/AA/USEPA/US]

# VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder  
Compliance and Innovation Strategies Division  
Office of Mobile Sources  
U. S. Environmental Protection Agency  
2000 Traverwood Dr.  
Ann Arbor, Michigan 48105

Leonard W. Kata Name  
Senior Manager Title  
EEO Department  
248-754-4204 Phone  
248-754-4207 Fax  
[leonard.kata@vw.com](mailto:leonard.kata@vw.com) E-Mail

September 27, 2012 Date

**REVIEWED AND ACCEPTED**  
DATE 10/25/12 EPA REP J.J.S.

Subject: Request for Use of Alternative Evaporative Canister Loading Procedure

VOLKSWAGEN GROUP OF AMERICA, INC.  
3800 HAMLIN ROAD  
AUBURN HILLS, MI 48326  
PHONE +1 248 754 5000

Dear Jim:

On September 20, 2012, representatives from Volkswagen AG and Volkswagen Group of America, Inc., met with you and other EPA staff to request the use of an alternate carbon canister loading procedure. The proposed procedure is patterned after the procedure for off-vehicle charge capable hybrid electric vehicles with non-integrated refuelling canister-only systems, as described in the California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles (amended March 22, 2012).

The request is described in the attached presentation material, which was provided to the agency at the September 20, 2012 meeting. The alternate procedure is intended for use on future model vehicles. This would be limited to conventional and hybrid vehicles that are equipped with non-integrated refueling emission control systems.

Please notify me if further clarification is required. I look forward to your response to this request.

Sincerely,  
VOLKSWAGEN GROUP OF AMERICA, INC.



Leonard W. Kata  
Senior Manager  
Engineering and Environmental Office

Enclosure

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 10/25/2012 7:52:17 PM  
**Subject:** VW Group - Service manuals  
<https://erwin.vw.com/>

Hi Jim,

For access to VW Group service manuals, please visit our Erwin site: <https://erwin.vw.com/>

From there, go to the "My erwin" link in the upper right and register.

Then, send me back your user ID and I will forward it to the guy who can set up your account at no charge.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207



**To:** Jim Snyder/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; incent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 10/26/2012 2:49:46 PM  
**Subject:** VW Vehicle delivery

Hi Jim, Hi Vince,

Just to confirm, we are planning to deliver the Audi A5 to your facility Monday morning. We should be there between 9 and 9:30 am.

Please pass the reminder along to Ben.

Thanks

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Fri 10/26/2012 2:58:00 PM  
**Subject:** Re: VW Vehicle delivery

Thanks for the "heads up" Mike.

Have a great weekend!

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
Date: 10/26/2012 10:50 AM  
Subject: VW Vehicle delivery

Hi Jim, Hi Vince,

Just to confirm, we are planning to deliver the Audi A5 to your facility Monday morning. We should be there between 9 and 9:30 am.

Please pass the reminder along to Ben.

Thanks

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 10/26/2012 8:06:25 PM  
**Subject:** ULSD Labels  
P1010002.JPG  
P1010001.JPG

Hi Jim,

As we discussed, I am attaching photos of USLD stickers which were present in the dash and fuel door of a MY 2012 Touareg in the lot (company issue production vehicle, not a test vehicle).

Regards

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207






Diesel/  
Diesel/

**DIESEL ONLY**  
**Gasoline**  
Never use gasoline.  
Even small amounts can cause engine damage!

5C0010823T  
**DIESEL ONLY**  
**Gasoline**  
Never use gasoline.  
Even small amounts can cause engine damage!

  
**ULTRA  
LOW-SULFUR  
DIESEL FUEL ONLY**  
07Z 010 621 E







**To:** David Good/AA/USEPA/US@EPA[]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Mon 10/29/2012 10:13:53 AM  
**Subject:** 2013 Audi Images for Online Guide  
[winmail.dat](#)  
[2013 Audi Q5.jpg](#)  
[2013 Audi S6.jpg](#)  
[2013 Audi S7.jpg](#)  
[2013 Audi S8.jpg](#)

Hello Dave;

After review of the fueleconomy.gov site we noticed a number of Audi models which did not have vehicle images posted. Please find images for the following Audi models:

Audi Q5 Hybrid  
Audi S6  
Audi S7  
Audi S8

Please pass these along to Janet to assist her in completing the Audi information on the web site. If there are any difficulties with these files please let me know.

Best regards,  
Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

**To:** Jim Snyder/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; hris Nevers/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; obert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; om Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]

**Cc:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Johnson, Stuart (EEO)" [Stuart.Johnson@vw.com]; Tamborra, Nick (EEO)" [Nick.Tamborra@vw.com]

**From:** "Kata, Leonard (EEO)"

**Sent:** Mon 10/29/2012 12:58:15 PM

**Subject:** Slides for Today's EPA/VW/Audi Meeting  
00 Agenda EPA Cert-Test.pptx  
01 Start Stop Survey.pptx  
02 FFV.pptx

1 OF 4

To all:

Attached are our slides for the meeting scheduled at 1:00 p.m. today.

Best regards,

Len



Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; im Snyder/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; hris Nevers/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; obert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; om Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]

**Cc:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Johnson, Stuart (EEO)" [Stuart.Johnson@vw.com]; Tamborra, Nick (EEO)" [Nick.Tamborra@vw.com]

**From:** "Kata, Leonard (EEO)"

**Sent:** Mon 10/29/2012 1:00:37 PM

**Subject:** RE: Slides for Today's EPA/VW/Audi Meeting  
03\_AWC.pptx  
04\_BEV\_EPA.pptx  
[leonard.kata@vw.com](mailto:leonard.kata@vw.com)

2 OF 4

From: Kata, Leonard (EEO)  
Sent: Monday, October 29, 2012 8:58 AM  
To: 'Jim Snyder/AA/USEPA/US'; 'Chris Nevers/AA/USEPA/US'; 'Joel Ball/AA/USEPA/US'; 'Joel Dalton/AA/USEPA/US'; 'wehrly.linc@epa.gov'; 'Roberts French/AA/USEPA/US'; 'Robert Peavyhouse/AA/USEPA/US'; 'Tom Anderson/AA/USEPA/US'; Sigelko, Jenny (EEO)  
Cc: Schmidt, Oliver; Johnson, Stuart (EEO); Tamborra, Nick (EEO)  
Subject: Slides for Today's EPA/VW/Audi Meeting

1 OF 4

To all:

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Best regards,

Len

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Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; hris Nevers/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; obert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; om Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]

**Cc:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Johnson, Stuart (EEO)" [Stuart.Johnson@vw.com]; Tamborra, Nick (EEO)" [Nick.Tamborra@vw.com]

**From:** "Kata, Leonard (EEO)"

**Sent:** Mon 10/29/2012 1:02:46 PM

**Subject:** RE: Slides for Today's EPA/VW/Audi Meeting  
05 BEVx 2012 EPA.ppt  
06 SAE 1634 EPA.pptx  
[leonard.kata@vw.com](mailto:leonard.kata@vw.com)

3 OF 4

From: Kata, Leonard (EEO)  
Sent: Monday, October 29, 2012 9:01 AM  
To: Kata, Leonard (EEO); 'Jim Snyder/AA/USEPA/US'; 'Chris Nevers/AA/USEPA/US'; 'Joel Ball/AA/USEPA/US'; 'Joel Dalton/AA/USEPA/US'; 'wehrly.linc@epa.gov'; 'Roberts French/AA/USEPA/US'; 'Robert Peavyhouse/AA/USEPA/US'; 'Tom Anderson/AA/USEPA/US'; Sigelko, Jenny (EEO)  
Cc: Schmidt, Oliver (EEO); Johnson, Stuart (EEO); Tamborra, Nick (EEO)  
Subject: RE: Slides for Today's EPA/VW/Audi Meeting

2 OF 4

From: Kata, Leonard (EEO)  
Sent: Monday, October 29, 2012 8:58 AM  
To: 'Jim Snyder/AA/USEPA/US'; 'Chris Nevers/AA/USEPA/US'; 'Joel Ball/AA/USEPA/US'; 'Joel Dalton/AA/USEPA/US'; 'wehrly.linc@epa.gov'; 'Roberts French/AA/USEPA/US'; 'Robert Peavyhouse/AA/USEPA/US'; 'Tom Anderson/AA/USEPA/US'; Sigelko, Jenny (EEO)  
Cc: Schmidt, Oliver; Johnson, Stuart (EEO); Tamborra, Nick (EEO)  
Subject: Slides for Today's EPA/VW/Audi Meeting

1 OF 4

To all:

Attached are our slides for the meeting scheduled at 1:00 p.m. today.

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; im Snyder/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; hris Nevers/AA/USEPA/US@EPA;Joel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oel Ball/AA/USEPA/US@EPA;Joel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oel Dalton/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Roberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; oberts French/AA/USEPA/US@EPA;Robert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; obert Peavyhouse/AA/USEPA/US@EPA;Tom Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; om Anderson/AA/USEPA/US@EPA;"Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]; Sigelko, Jenny (EEO)" [Jenny.Sigelko@vw.com]

**Cc:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Johnson, Stuart (EEO)" [Stuart.Johnson@vw.com]; Tamborra, Nick (EEO)" [Nick.Tamborra@vw.com]

**From:** "Kata, Leonard (EEO)"

**Sent:** Mon 10/29/2012 1:04:16 PM

**Subject:** RE: Slides for Today's EPA/VW/Audi Meeting  
[07\\_PHEV.pptx](#)  
[08\\_Energy\\_assist\\_EPA.pptx](#)  
[leonard.kata@vw.com](mailto:leonard.kata@vw.com)

4 OF 4

From: Kata, Leonard (EEO)  
Sent: Monday, October 29, 2012 9:03 AM  
To: 'Jim Snyder/AA/USEPA/US'; 'Chris Nevers/AA/USEPA/US'; 'Joel Ball/AA/USEPA/US'; 'Joel Dalton/AA/USEPA/US'; 'wehrly.linc@epa.gov'; 'Roberts French/AA/USEPA/US'; 'Robert Peavyhouse/AA/USEPA/US'; 'Tom Anderson/AA/USEPA/US'; Sigelko, Jenny (EEO)  
Cc: Schmidt, Oliver (EEO); Johnson, Stuart (EEO); Tamborra, Nick (EEO)  
Subject: RE: Slides for Today's EPA/VW/Audi Meeting

3 OF 4

From: Kata, Leonard (EEO)  
Sent: Monday, October 29, 2012 9:01 AM  
To: Kata, Leonard (EEO); 'Jim Snyder/AA/USEPA/US'; 'Chris Nevers/AA/USEPA/US'; 'Joel Ball/AA/USEPA/US'; 'Joel Dalton/AA/USEPA/US'; 'wehrly.linc@epa.gov'; 'Roberts French/AA/USEPA/US'; 'Robert Peavyhouse/AA/USEPA/US'; 'Tom Anderson/AA/USEPA/US'; Sigelko, Jenny (EEO)  
Cc: Schmidt, Oliver (EEO); Johnson, Stuart (EEO); Tamborra, Nick (EEO)  
Subject: RE: Slides for Today's EPA/VW/Audi Meeting

2 OF 4

From: Kata, Leonard (EEO)  
Sent: Monday, October 29, 2012 8:58 AM  
To: 'Jim Snyder/AA/USEPA/US'; 'Chris Nevers/AA/USEPA/US'; 'Joel Ball/AA/USEPA/US'; 'Joel Dalton/AA/USEPA/US'; 'wehrly.linc@epa.gov'; 'Roberts French/AA/USEPA/US'; 'Robert Peavyhouse/AA/USEPA/US'; 'Tom Anderson/AA/USEPA/US'; Sigelko, Jenny (EEO)  
Cc: Schmidt, Oliver; Johnson, Stuart (EEO); Tamborra, Nick (EEO)  
Subject: Slides for Today's EPA/VW/Audi Meeting

1 OF 4

To all:

Attached are our slides for the meeting scheduled at 1:00 p.m. today.



Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; inccent Mazaitis/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 10/29/2012 3:33:12 PM  
**Subject:** VW - A8 TDI

Hi Jim, Hi Vince,

Just following up on our A8 TDI, can you check latest status and let us know how the schedule looks?

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Mon 10/29/2012 5:04:10 PM  
**Subject:** Re: VW - A8 TDI

Hello Mike,

I checked with the lab and everything for 329 is still on hold. We'll let you know when things start to move.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 10/29/2012 11:33 AM  
Subject: VW - A8 TDI

Hi Jim, Hi Vince,

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Thanks,

Mike

Michael Giles

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Engineering and Environmental Office

Volkswagen Group of America, Inc.

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Auburn Hills, MI 48326

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Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Vincent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 10/29/2012 5:05:21 PM  
**Subject:** RE: VW - A8 TDI  
[michael.giles@vw.com](mailto:michael.giles@vw.com)

Thanks for the update Vince

From: Mazaitis.Vincent@epamail.epa.gov [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Monday, October 29, 2012 1:04 PM  
To: Giles, Michael (EEO)  
Cc: Snyder.Jim@epamail.epa.gov  
Subject: Re: VW - A8 TDI

Hello Mike,

I checked with the lab and everything for 329 is still on hold. We'll let you know when things start to move.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 10/29/2012 11:33 AM  
Subject: VW - A8 TDI

Hi Jim, Hi Vince,

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Thanks,

Mike

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United States of America

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**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Ben Haynes/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]; N=Ben Haynes/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Mon 10/29/2012 6:59:19 PM  
**Subject:** Re: VW - A5 Schedule

Hello Mike,

DFUB-BAQ is scheduled to roadload and prep tomorrow, 10/30/12, and test on 10/31/12. I would suggest to have Domenic and the other engineer here at 7:00 a.m. If there is a change, I'll let you know.

Ben noted there are some concerns with the vehicle. The tires on the vehicle are a different size than listed on the door jamb of the vehicle and in Verify. Please get with Jim Snyder or David Wright on that. Also there are no instructions on accessing the electronic oil level indication system, which is something we need to do.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rist, Domenic (I/EA-523)" <Domenic.Rist@audi.de>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 10/29/2012 01:51 PM  
Subject: VW - A5 Schedule

Hello Vince,

Just a small request related to the A5 test schedule: Domenic and one other engineer would like to witness the start of test. So, if you could keep us advised of the planned start time then they will plan to meet you then.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

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Auburn Hills, MI 48326

United States of America

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**To:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA;CN=Ben Haynes/OU=AA/O=USEPA/C=US@EPA[]; N=Ben Haynes/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 10/29/2012 9:08:24 PM  
**Subject:** Re: VW - A5 Schedule

Ben I talked to Domenic and he is looking into the tire issue. regardless of which tires, I want to confirm that we have the correct target ABCs before we do a road load. Mike, the supplemental's tire info needs to be corrected

Also, Domenic will bring a scan tool to look at the oil level tuesday.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Jim Snyder/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA;Ben Haynes/AA/USEPA/US@EPA[]; inent Mazaitis/AA/USEPA/US@EPA;Ben Haynes/AA/USEPA/US@EPA[]; en Haynes/AA/USEPA/US@EPA[]  
**Cc:** "Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 10/30/2012 1:27:27 PM  
**Subject:** RE: VW - A5 Schedule  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Hello All,

The supplemental dataset for the A5 has been changed to reflect the tire size 225/50 R17.

Please let me know ASAP if you have any other questions.

Thanks,

Mike

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, October 29, 2012 5:08 PM  
To: Mazaitis.Vincent@epamail.epa.gov; Haynes.Ben@epamail.epa.gov  
Cc: Giles, Michael (EEO); Rist, Domenic (I/EA-523)  
Subject: Re: VW - A5 Schedule

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(734) 214-4946  
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**From:** Giedrius Ambrozaitis

**Sent:** Tue 10/30/2012 1:59:35 PM  
**Subject:** SCR Stakeholder Group -- Meeting October 31  
[SCR Stakeholder Mtg Agenda October 31, 2012.doc](#)  
[SCR Stakeholder group email list - October 2012.xls](#)  
[Minutes SCR Urea stakeholders workgroup - April 24, 2012.doc](#)  
<http://www.integer-research.com/conferences/dec-usa/>  
[gambrozaitis@autoalliance.org](mailto:gambrozaitis@autoalliance.org)

This is a reminder that despite Hurricane Sandy, the next meeting of the SCR Stakeholder Group will be held on October 31 at 3:00 PM Eastern at the Westin hotel, Cincinnati, Ohio, in conjunction with Integer Diesel Emissions Conference USA conference. Please see <http://www.integer-research.com/conferences/dec-usa/>

for information on the conference.

The call in info will be (213) 493-0606 with access Code: 825-359-856.

Attached is the excel stakeholder contact list and minutes and agenda.

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The SCR Stakeholder Group (formerly called the Urea Stakeholder Group) is made up of industries, organizations and companies interested in urea for mobile source applications.

Participants include:

- Government (US Department of Energy, EPA)
- Automotive and heavy-duty engine and truck manufacturer trade associations
- Fuel retailer and truck stop trade associations
- Oil companies
- Urea distributors
- Petroleum dispenser manufacturers and associations

The main objectives of the SCR Stakeholder Group are:

To exchange information with US government and other potential urea stakeholders on the potential market and need for urea availability.

To consider effective education and outreach to consumers and commercial concerns about urea, its use and availability.

To engage potential providers of urea availability to determine the conditions necessary for provision of retail availability before a profitable market exists.

If you have any questions concerning the SCR Stakeholder Group or the meeting, please call me at (248) 915-8836.

Sincerely,

Giedrius Ambrozaitis  
Director, Environmental Affairs  
Alliance of Automobile Manufacturers  
Tel. (248) 915-8836  
email: [gambrozaitis@autoalliance.org](mailto:gambrozaitis@autoalliance.org)

**Agenda**  
**SCR Stakeholder Group Meeting**  
**October 31, 2012**

Location:

**Hayes Room 3<sup>rd</sup> floor**

**The Westin**

**Cincinnati, Ohio**

21 E. 5th Street • Cincinnati, OH 45202

Phone: (513) 621-7700

Conference call number:

1-213-493-0606 with code 825-359-856

Agenda

**SCR Stakeholder Group Meeting (3:00 pm - 5:00 pm)**

<b>1. Introduction/Roll Call</b>	Ambrozaitis / Patrick Kelly	1 min
<b>2. Review of previous meeting</b>	Neil Whitbeck/All	5 mins
<b>3. DEF Certification program Subcommittee</b> a. DEF-AMAP update	Kevin Ferrick / Jeff Harmening	15 mins
<b>4. ASTM D15 Committee</b> a. ASTM DEF subcommittee D15.25	Joe Koury / John Gallagher - ASTM	15 mins
<b>5. Standards</b> a) update on the Marine Grade DEF Draft Standard submitted to ISO Norway in March.  b) Recommendations for materials of compatibility deletions and additions (Table 1 of ISO22241-3) submitted in March.	Donald Thomas / Jim Spooner	15 mins
<b>6. SCR Communications Subcommittee</b> a. SCR/DEF news coverage report, industry announcements & developments b. Websites update d. DEF Conferences update	Christopher Goodfellow / Rebecca Shellim	15 mins
<b>7. DEF Bulk Dispenser Subcommittee</b> a. Recommended Practice released and available at PEI.org	Bob Renkes / All	No report
<b>8. Regulatory Developments</b> a. EPA Proposed Rule (NPRM) on Emergency Vehicles and SCR Maintenance	<a href="http://www.gpo.gov/fdsys/pkg/FR-2012-06-08/pdf/2012-13087.pdf">http://www.gpo.gov/fdsys/pkg/FR-2012-06-08/pdf/2012-13087.pdf</a>	15 mins
<b>9. Meeting Closure</b> Review of goals and targets New Business Schedule Next Meeting	Neil Whitbeck / All	5 mins



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 10/31/2012 2:22:36 PM  
**Subject:** Variable speed fan for FTP  
[Jenny.Sigelko@VW.com](mailto:Jenny.Sigelko@VW.com)

Hi Jim,

Can you give us any feedback about the use of variable speed fans for the FTP – is this currently acceptable? It sounds like we may want to do that for at least one vehicle in the future.

Thanks,

Mike

PS – please don't forget to register in the link I sent you, then send me your account name and we can get you free access to the service manuals.

From: Rodgers, William (EEO)  
Sent: Wednesday, October 31, 2012 10:12 AM  
To: Giles, Michael (EEO)  
Subject: FW: FTP test procedures

From: Sigelko, Jenny (EEO)  
Sent: Thursday, October 25, 2012 6:30 AM  
To: Rodgers, William (EEO)  
Cc: Braun, Marcus (N/EA-521); Stang, Carsten (N/EA-521)  
Subject: RE: FTP test procedures

I believe it is acceptable to use a variable fan if you keep the hood closed. I will have to check to make sure. The new 1066 is going to be very clear that this method is allowable, but I think EPA does allow it right now, keeping the hood closed. I'll confirm and reply again.

Thanks

Jenny Sigelko

Volkswagen Group of America

EEO-Auburn Hills MI

248 754 4214

Jenny.Sigelko@VW.com

From: Rodgers, William (EEO)  
Sent: Tuesday, October 23, 2012 1:31 PM  
To: Sigelko, Jenny (EEO)  
Cc: Braun, Marcus (N/EA-521); Stang, Carsten (N/EA-521)  
Subject: FTP test procedures

Hello Jenny,

The question was raised by Audi whether variable speed fans are allowed during the FTP cycle. We are locating for the current language which I'm pretty sure spells out a fixed fan volume. In the meantime, do you know if there has been any discussion about this for the new 1066 regulations.

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Lynn Sohacki/AA/USEPA/US@EPA;"Berenz, Sebastian [Sebastian.Berenz@vw.com];  
Berenz, Sebastian [Sebastian.Berenz@vw.com]  
**From:** Justin Wiseman  
**Sent:** Wed 10/31/2012 3:23:42 PM  
**Subject:** Procurement of the VW Routan [Ex. 6]

Lynn, I have asked Sebastian from Volkswagon to contact the owner of [Ex. 6] and work to procure this vehicle for testing at the Chrysler Proving Grounds once it has been returned. We wanted to make the EPA aware of our intent to contact the owner in case they should contact you or URS.

Please advise when this vehicle is released back to the owner by the EPA/URS.

Thank you,

Justin G. Wiseman

In Use Emissions & Certification Testing

Chrysler Group LLC

Desk 248.512.0309

Description: Description: Description: cid:image001.jpg@01CC46BA.5C0589F0

\*\*\*\*\* ATTACHMENT NOT DELIVERED \*\*\*\*\*

This Email message contained an attachment named  
image001.jpg  
which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name.

For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

\*\*\*\*\* ATTACHMENT NOT DELIVERED \*\*\*\*\*

\*\*\*\*\* ATTACHMENT NOT DELIVERED \*\*\*\*\*

This Email message contained an attachment named image001.jpg which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name.

For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

\*\*\*\*\* ATTACHMENT NOT DELIVERED \*\*\*\*\*

**To:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; im Snyder/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Wed 10/31/2012 9:57:13 PM  
**Subject:** 2.0L TDI Diesel Discussion

When: Wednesday, November 07, 2012 10:00 AM-11:00 AM (GMT-05:00) Eastern Time (US & Canada).  
Where: Telephone Conference

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

Hello all:

We would like to have a telephone conference with EPA to discuss the 2.0L TDI diesel that was recently tested at the EPA laboratory.

A local and toll-free dial in is provided below, as well as the passcode.

Please let me know if this date and time is acceptable.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com<mailto:leonard.kata@vw.com>

Join online meeting<<https://join.vw.com/leonard.kata/76929Z78>>  
<https://join.vw.com/leonard.kata/76929Z78>

Join by Phone

**Ex. 6**

Find a local number<<https://dialin.vw.com>>

Conference ID: **Ex. 6**

Forgot your dial-in PIN?<<https://dialin.vw.com>> | First online meeting?<<http://r.office.microsoft.com/r/rldOC10?clid=1033&p1=4&p2=1041&pc=oc&ver=4&subver=0&bld=7185&bldver=0>>  
[!OC([1033])!]

.....

**To:** Jim Snyder/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; incent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Stang, Carsten (N/EA-521)" [Carsten.Stang@audi.de]; Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 11/2/2012 2:14:52 PM  
**Subject:** VW A8 Test

Hello Jim and Vince,

Just a couple things related to the A8 tests next week:

- Due to the fact that there is current drain when the vehicle sits with the key (the vehicle and the key "talk to each other") - could you arrange to have a charger connected to the vehicle battery over the weekend? This would be helpful to prevent any complications from a dead battery.

- Just a reminder - we are requesting the use of 2 small fans (FTP/HWY) and 2 large fans for US06, which is the same setup used for the other 3.0L TDI vehicles (Q7 and Touareg). The details are provided in the supplemental information, please advise if there are any concerns.

I plan to confirm the test schedule with you Monday. If all goes as planned I will also be there to see the start of test Tuesday.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207



**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Stang, Carsten (N/EA-521)" [Carsten.Stang@audi.de]; Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Fri 11/2/2012 5:46:43 PM  
**Subject:** Re: VW A8 Test

The charger is a reasonable request considering the delay and we've tested the diesels with this fan setup before. Vince and I discussed it and he has already informed the lab.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Stang, Carsten (N/EA-521)" <Carsten.Stang@audi.de>, "Rist, Domenic (I/EA-523)" <Domenic.Rist@audi.de>, "Rodgers, William (EEO)" <William.Rodgers@vw.com>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
Date: 11/02/2012 10:15 AM  
Subject: VW A8 Test

Hello Jim and Vince,

Just a couple things related to the A8 tests next week:

- Due to the fact that there is current drain when the vehicle sits with the key (the vehicle and the key "talk to each other") - could you arrange to have a charger connected to the vehicle battery over the weekend? This would be helpful to prevent any complications from a dead battery.
- Just a reminder - we are requesting the use of 2 small fans (FTP/HWY) and 2 large fans for US06, which is the same setup used for the other 3.0L TDI vehicles (Q7 and Touareg). The details are provided in the supplemental information, please advise if there are any concerns.

I plan to confirm the test schedule with you Monday. If all goes as planned I will also be there to see the start of test Tuesday.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 11/2/2012 6:03:13 PM  
**Subject:** VW Group - Question about current measurement

Hi Jim,

Would you be able to tell us what kind of analyzer is used for current measurement for the hybrids? We want to confirm that it is similar to what we use to understand our correlation.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Mon 11/5/2012 12:06:33 PM  
**Subject:** 2.0L TDI Diesel Confernece Call

Hello Jim:

I understand that you had asked Mike Giles about the content of the telephone conference we wish to have at 10:00 a.m. on Wednesday, November 7, 2012. As you recall, we recently tested a 2.0L TDI Diesel vehicle at EPA. The vehicle exceeded the emission standard, and was removed from the laboratory for analysis. We wish to present our engineering analysis and discuss next steps. I expect the meeting to be more of a technical discussion, than one regarding policy.

I assume that the meeting time and date is acceptable. Please let me know if any changes are necessary. The dial-in information is in the invitation and shown below:

Join by Phone

Local: +1 (248) 754-6400, or

Toll free: +1 (855) 858-8080

Conference ID: Ex. 6

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; inccent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 11/5/2012 5:54:13 PM  
**Subject:** VW Group Testing

Hi Jim and Vince,

Could either of you confirm that the A8 TDI testing is still on as planned for tomorrow morning ? If so I will be there at 7:00 or let me know otherwise.

Lastly, when it's available, could you please send me PDF copies of your lab reports for the A5 testing performed last week.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207



**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA,"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Mon 11/5/2012 6:52:50 PM  
**Subject:** Re: VW Group Testing

Hello Mike,

Just a follow-up e-mail, we should have lab data for the A5 later this afternoon, and the A8 diesel test is on track to test tomorrow 11/6/12. Please be here by 7:00 a.m.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 11/05/2012 12:57 PM  
Subject: VW Group Testing

Hi Jim and Vince,

Could either of you confirm that the A8 TDI testing is still on as planned for tomorrow morning ? If so I will be there at 7:00 or let me know otherwise.

Lastly, when it's available, could you please send me PDF copies of your lab reports for the A5 testing performed last week.

Thanks,

Mike



Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 11/5/2012 7:45:40 PM  
**Subject:** Re: VW Group - Question about current measurement

We use a Hioki 3193 power meter with a clamp on probe for vehicle measurement. For AC recharge energy, there is another Hioki upstream of the charging outlet.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 11/02/2012 02:03 PM  
**Subject:** VW Group - Question about current measurement

Hi Jim,

Would you be able to tell us what kind of analyzer is used for current measurement for the hybrids? We want to confirm that it is similar to what we use to understand our correlation.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 11/5/2012 7:56:03 PM  
**Subject:** RE: VW Group - Question about current measurement  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)

Thanks Jim, I believe this will answer the question from the factory.

Mike

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, November 05, 2012 2:46 PM  
To: Giles, Michael (EEO)  
Subject: Re: VW Group - Question about current measurement

We use a Hioki 3193 power meter with a clamp on probe for vehicle measurement. For AC recharge energy, there is another Hioki upstream of the charging outlet.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <[michael.giles@vw.com](mailto:michael.giles@vw.com)>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 11/02/2012 02:03 PM  
Subject: VW Group - Question about current measurement

Hi Jim,

Would you be able to tell us what kind of analyzer is used for current measurement for the hybrids? We want to confirm that it is similar to what we use to understand our correlation.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Vincent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 11/5/2012 9:49:19 PM  
**Subject:** RE: VW Group Testing  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)

Thanks Vince.

Could you please copy Bill Rodgers on the lab reports Tuesday, since I did not get the reports yet and I will not have email access tomorrow at EPA.

Regards

Mike

From: Mazaitis.Vincent@epamail.epa.gov [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Monday, November 05, 2012 1:53 PM  
To: Giles, Michael (EEO)  
Cc: Snyder.Jim@epamail.epa.gov; Rodgers, William (EEO)  
Subject: Re: VW Group Testing

Hello Mike,

Just a follow-up e-mail, we should have lab data for the A5 later this afternoon, and the A8 diesel test is on track to test tomorrow 11/6/12. Please be here by 7:00 a.m.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 11/05/2012 12:57 PM  
Subject: VW Group Testing

Hi Jim and Vince,

Could either of you confirm that the A8 TDI testing is still on as planned for tomorrow morning ? If so I will be there at 7:00 or let me know otherwise.

Lastly, when it's available, could you please send me PDF copies of your lab reports for the A5 testing performed last week.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Rodgers, William" [William.Rodgers@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Tue 11/6/2012 1:28:50 PM  
**Subject:** Fw: DFUB-BAQ  
[\[Untitled\].pdf](#)

Gentlemen,

Please find enclosed the FTP Laboratory Test Results for the Subject vehicle. If you have any questions or concerns, please contact me.

Thank you,

Vince Mazaitis

----- Forwarded by Vincent Mazaitis/AA/USEPA/US on 11/06/2012 08:26 AM -----

**From:** "EZTech\_Printer" <EZTek@epa.gov>  
**To:** Vincent Mazaitis/AA/USEPA/US@EPA  
**Date:** 11/06/2012 08:24 AM  
**Subject:** DFUB-BAQ

**To:** "Rodgers, William" [William.Rodgers@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Tue 11/6/2012 2:12:02 PM  
**Subject:** Fw: DFUB-BAQ\_Evap  
[\[Untitled\].pdf](#)

Good morning again guys,

Enclosed is the (unofficial) lab copy of the Evap test. Efforts are being make to enter the data into Verify. Again, if you have any questions or concerns, please call me. (Sorry the data is upsidedown!)

Thanks,

Vince Mazaitis

----- Forwarded by Vincent Mazaitis/AA/USEPA/US on 11/06/2012 09:08 AM -----

**From:** "EZTech\_Printer" <EZTek@epa.gov>  
**To:** Vincent Mazaitis/AA/USEPA/US@EPA  
**Date:** 11/06/2012 09:03 AM  
**Subject:** DFUB-BAQ\_Evap



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** Vincent Mazaitis/AA/USEPA/US@EPA;"Rhodes, Brian (EEO)"  
[Brian.Rhodes@vw.com]; Rhodes, Brian (EEO)" [Brian.Rhodes@vw.com];  
Tremonti, Norm (EEO)" [Norm.Tremonti@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 11/7/2012 12:53:45 PM  
**Subject:** VW Group - Release requested for Audi A5

Hi Jim,

We would like to request release of the A5. Let us know when it is released and we will arrange to pick it up.

Thanks!

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Wed 11/7/2012 2:49:13 PM  
**Subject:** Slides for Toady's Conference Call  
[NB\\_Engineering\\_Report.pdf.pdf](#)  
[OBD\\_Approval\\_DVWXV02.0U5N\\_E-12-090.pdf](#)  
[KI\\_FACTOR\\_Typo\\_Correction.pdf](#)

Hello Jim:

Attached is a presentation and background material for today's discussion of the 2.0L TDI.

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com



Matthew Rodriguez  
Secretary for  
Environmental Protection

# Air Resources Board

Mary D. Nichols, Chairman  
9480 Telstar Avenue, Suite 4  
El Monte, California 91731 www.arb.ca.gov



Edmund G. Brown Jr.  
Governor

May 3, 2012

Reference No. E-12-090

Oliver Schmidt  
General Manager  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

Post-It® Fax Note	7671	Date	5/3/12	# of pages	2
To	VW	From	CARB		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #	248-759-4207	Fax #	926-575-7012		

SUBJECT: Approval of Volkswagen's (VW) On-Board Diagnostic II (OBD II) System for  
2013 Model Year Test Group DVWXV02.0U5N

Dear Mr. Schmidt:

The Air Resources Board's (ARB) Engineering Studies Branch has received the OBD II system description submitted by VW for the 2013 model year test group listed above. Representations made in the application indicate that the system is compliant with the OBD II regulation with the exception of NOx adsorber efficiency monitoring and oxygen sensor offset monitoring. Therefore, ARB approves the 2013 model year system with two deficiencies. While not considered deficient, staff has concerns regarding NOx adsorber efficiency monitoring and high temperature disablement. Details regarding the NOx adsorber efficiency monitoring deficiency and high temperature disablement concern are noted below. Details of the remaining deficiency and concern are noted in a previous approval letter (Reference No. E-10-123).

## NOx Adsorber Efficiency Monitoring Deficiency

For the 2013 model year, NOx adsorber efficiency monitoring is required to detect malfunctions at 1.75 times the standard. In presentations to ARB, VW has shown endurance run data indicating false failure decisions for the monitor calibrated at 1.75 times the standard and thus, the monitor has been calibrated to detect failures at 2.25 times the standard. Therefore, NOx adsorber efficiency monitoring is considered to be deficient. In order to remove this deficiency, VW is required to demonstrate robust detection of NOx adsorber efficiency malfunctions at 1.75 times the standard.

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

Printed on Recycled Paper

Mr. Schmidt  
May 3, 2012  
Page 2

### High Temperature Disablement Concern

VW's OBD II strategy includes use of the engine coolant temperature (ECT) sensor to disable intake/exhaust flap adaptation and monitoring at temperatures above the normal operating temperature. However, the temperature used for disablement (94.96°C) is below the temperature which would indicate an over temperature condition to a vehicle operator (e.g., in the red zone of the temperature gauge or when the hot lamp is illuminated, 124°C). Furthermore, VW has indicated that the regulating temperature of the thermostat is 87°C, leaving only an 8°C gap between the regulating temperature and disablement of adaption and monitoring. While VW properly monitors the ECT sensor to identify malfunctions of the sensor itself to falsely indicate a warmer than normal temperature, staff is concerned that a biased high ECT sensor and/or other conditions that may cause actual elevated coolant temperature could disable adaptation/monitoring without any indication to a driver or technician. In order to remove the concern, VW is required to modify the adaptation and diagnostics to avoid disablement at temperatures below the temperature which indicates an over temperature condition to the vehicle operator.

Should you have questions or comments regarding this letter, please have your staff contact Ex. 7

Sincerely,

**Ex. 7**

Ex. 7

Mobile Source Control Division

cc:

Ex. 7

Engineering Evaluation Section

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Rhodes, Brian (EEO)" [Brian.Rhodes@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Tremonti, Norm (EEO)" [Norm.Tremonti@vw.com]; Tremonti, Norm (EEO)" [Norm.Tremonti@vw.com]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Wed 11/7/2012 4:54:09 PM  
**Subject:** Re: VW Group - Release requested for Audi A5

Hello Mike,

The "official" results are finally in Verify. You may pick up the vehicle at any time. The vehicle is in the West lot and the keys are with Security as usual.

Thanks for your patience Mike!

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: Vincent Mazaitis/AA/USEPA/US@EPA, "Rhodes, Brian (EEO)" <Brian.Rhodes@vw.com>, "Tremonti, Norm (EEO)" <Norm.Tremonti@vw.com>  
Date: 11/07/2012 07:54 AM  
Subject: VW Group - Release requested for Audi A5

Hi Jim,

We would like to request release of the A5. Let us know when it is released and we will arrange to pick it up.

Thanks!

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Vincent Mazaitis/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 11/7/2012 8:11:50 PM  
**Subject:** RE: Voice Mail from Vincent Mazaitis (Work) (28 seconds)  
[7342144864](#)  
[Learn More...](#)  
[7342144864](#)  
[\(734\) 214-4864](#)  
[Mazaitis.Vincent@epamail.epa.gov](mailto:Mazaitis.Vincent@epamail.epa.gov)

Hi Vince,

Thanks for the follow up. Despite earlier intentions, as of now we will not plan to go to EPA for the Thursday tests.

SO, please call either Bill or I if there are any issues. We will follow up from here as best we can, or drive there if needed.

Thanks

Mike

From: Microsoft Outlook On Behalf Of Vincent Mazaitis  
Sent: Wednesday, November 07, 2012 1:53 PM  
To: Giles, Michael (EEO)  
Subject: Voice Mail from Vincent Mazaitis (Work) (28 seconds)

Voice Mail Preview:

Hi mike guard it's Vincent so I just wanted to EPARE it's one 2:00 dish are just wanted to double check with you on whether you were going to be here tomorrow for the start of the test do not.

Call please give me a call back area code.

7342144864 justice awaited just started a really up on release on o'clock so or give me a call back if you would please thanks bye.

Created by Microsoft Speech Technology. [Learn More...](#)

You received a voice mail from Vincent Mazaitis at 7342144864

Caller-Id:  
7342144864

Work:  
(734) 214-4864

E-mail:  
Mazaitis.Vincent@epamail.epa.gov



**To:** Jim Snyder/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; incent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rhodes, Brian (EEO)" [Brian.Rhodes@vw.com]; Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 11/8/2012 2:04:10 PM  
**Subject:** Vehicle pick up - Audi A5

Hello Jim and Vince,

The plan is to pick up the Audi A5 Friday morning, probably around 9:00 am.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Rhodes, Brian (EEO)" [Brian.Rhodes@vw.com]; Rist, Domenic (I/EA-523)" [Domenic.Rist@audi.de]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Thur 11/8/2012 2:28:50 PM  
**Subject:** Re: Vehicle pick up - Audi A5

Hello Mike,

Following up the phone message I left, you're good to go on the A5. Just have your driver see Security. The vehicle will be in the West lot.

Thanks Mike,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>, "Rhodes, Brian (EEO)" <Brian.Rhodes@vw.com>, "Rist, Domenic (I/EA-523)" <Domenic.Rist@audi.de>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
Date: 11/08/2012 09:05 AM  
Subject: Vehicle pick up - Audi A5

Hello Jim and Vince,

The plan is to pick up the Audi A5 Friday morning, probably around 9:00 am.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Thur 11/8/2012 5:36:37 PM  
**Subject:** Re: A8 results from Tuesday  
[D3UG-DAQ 11-6-12.pdf](#)

Hello Mike,

Sorry for the mix-up. Please find enclosed the Laboratory Test Data from the A8

If you have any questions or concerns, please contact me.

Thanks,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 11/08/2012 11:14 AM  
Subject: A8 results from Tuesday

Hi Vince,

We found a first day testing in our VERIFY inbox for the A8 TDI.

Could you also me the PDF files of the lab reports (with all the bag data)?

Thanks!

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Vincent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA[]; avidA Wright/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 11/8/2012 5:38:20 PM  
**Subject:** RE: A8 results from Tuesday  
[michael.giles@vw.com](mailto:michael.giles@vw.com)

No problem, thanks!

From: Mazaitis.Vincent@epamail.epa.gov [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Thursday, November 08, 2012 12:36 PM  
To: Giles, Michael (EEO)  
Cc: Snyder.Jim@epamail.epa.gov; Wright.DavidA@epamail.epa.gov  
Subject: Re: A8 results from Tuesday

Hello Mike,

Sorry for the mix-up. Please find enclosed the Laboratory Test Data from the A8

If you have any questions or concerns, please contact me.

Thanks,

Vince Mazaitis

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Vincent Mazaitis/AA/USEPA/US@EPA  
Date: 11/08/2012 11:14 AM  
Subject: A8 results from Tuesday

Hi Vince,

We found a first day testing in our VERIFY inbox for the A8 TDI.

Could you also me the PDF files of the lab reports (with all the bag data)?

Thanks!

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Rodgers, William"  
[William.Rodgers@vw.com]  
**Cc:** CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=DavidA  
Wright/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Fri 11/9/2012 1:00:20 PM  
**Subject:** D3UG-DAQ  
D3UG-DAQ 11-8-12\_Start-Stop.pdf

Good morning Mike and Bill,

Please find enclosed the Laboratory Test Data for the Subject vehicle. It is with the start/stop functional.

If you have any questions or concerns, please contact me.

Thanks guys, and have a great weekend!

Vince Mazaitis



**To:** Vincent Mazaitis/AA/USEPA/US@EPA;"Giles, Michael (EEO)" [michael.giles@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA[]; avidA Wright/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Fri 11/9/2012 1:49:11 PM  
**Subject:** RE: D3UG-DAQ

Thanks Vince. We will discuss with Germany and let you know if the car is to be released.

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

From: Mazaitis.Vincent@epamail.epa.gov [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Friday, November 09, 2012 8:00 AM  
To: Giles, Michael (EEO); Rodgers, William (EEO)  
Cc: Snyder.Jim@epamail.epa.gov; Wright.DavidA@epamail.epa.gov  
Subject: D3UG-DAQ

Good morning Mike and Bill,

Please find enclosed the Laboratory Test Data for the Subject vehicle. It is with the start/stop functional.

If you have any questions or concerns, please contact me.

Thanks guys, and have a great weekend!

Vince Mazaitis

**To:** Vincent Mazaitis/AA/USEPA/US@EPA;"Giles, Michael (EEO)" [michael.giles@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** Jim Snyder/AA/USEPA/US@EPA;DavidA Wright/AA/USEPA/US@EPA[]; avidA Wright/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Fri 11/9/2012 2:52:19 PM  
**Subject:** RE: D3UG-DAQ  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)  
[Mazaitis.Vincent@epamail.epa.gov](mailto:Mazaitis.Vincent@epamail.epa.gov)  
[mailto:Mazaitis.Vincent@epamail.epa.gov](mailto:mailto:Mazaitis.Vincent@epamail.epa.gov)  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)  
[Wright.DavidA@epamail.epa.gov](mailto:Wright.DavidA@epamail.epa.gov)

Vince,

As discussed, we will accept the confirmatory test data for VID D3UG-DAQ. Please release the vehicle for pick up today.

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

From: Rodgers, William (EEO)  
Sent: Friday, November 09, 2012 8:49 AM  
To: 'Mazaitis.Vincent@epamail.epa.gov'; Giles, Michael (EEO)  
Cc: Snyder.Jim@epamail.epa.gov; Wright.DavidA@epamail.epa.gov  
Subject: RE: D3UG-DAQ

Thanks Vince. We will discuss with Germany and let you know if the car is to be released.

Bill Rodgers

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Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

From: Mazaitis.Vincent@epamail.epa.gov [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Friday, November 09, 2012 8:00 AM  
To: Giles, Michael (EEO); Rodgers, William (EEO)  
Cc: Snyder.Jim@epamail.epa.gov; Wright.DavidA@epamail.epa.gov  
Subject: D3UG-DAQ

Good morning Mike and Bill,

Please find enclosed the Laboratory Test Data for the Subject vehicle. It is with the start/stop functional.

If you have any questions or concerns, please contact me.

Thanks guys, and have a great weekend!

Vince Mazaitis

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Giles, Michael (EEO)" [michael.giles@vw.com]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Giles, Michael (EEO)" [michael.giles@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US  
**Sent:** Fri 11/9/2012 3:15:20 PM  
**Subject:** RE: D3UG-DAQ  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)  
[Mazaitis.Vincent@epamail.epa.gov](mailto:Mazaitis.Vincent@epamail.epa.gov)  
[mailto:Mazaitis.Vincent@epamail.epa.gov](mailto:mailto:Mazaitis.Vincent@epamail.epa.gov)  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)  
[Wright.DavidA@epamail.epa.gov](mailto:Wright.DavidA@epamail.epa.gov)

Thanks Bill!

The vehicle has been released and your driver can pick up the keys from Security as usual.

Vince Mazaitis

**From:** "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
**To:** Vincent Mazaitis/AA/USEPA/US@EPA, "Giles, Michael (EEO)" <michael.giles@vw.com>  
**Cc:** Jim Snyder/AA/USEPA/US@EPA, DavidA Wright/AA/USEPA/US@EPA  
**Date:** 11/09/2012 09:52 AM  
**Subject:** RE: D3UG-DAQ

Vince,

As discussed, we will accept the confirmatory test data for VID D3UG-DAQ. Please release the vehicle for pick up today.

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

From: Rodgers, William (EEO)  
Sent: Friday, November 09, 2012 8:49 AM  
To: 'Mazaitis.Vincent@epamail.epa.gov'; Giles, Michael (EEO)  
Cc: Snyder.Jim@epamail.epa.gov; Wright.DavidA@epamail.epa.gov  
Subject: RE: D3UG-DAQ

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Bill Rodgers

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Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

From: Mazaitis.Vincent@epamail.epa.gov [mailto:Mazaitis.Vincent@epamail.epa.gov]  
Sent: Friday, November 09, 2012 8:00 AM  
To: Giles, Michael (EEO); Rodgers, William (EEO)  
Cc: Snyder.Jim@epamail.epa.gov; Wright.DavidA@epamail.epa.gov  
Subject: D3UG-DAQ

Good morning Mike and Bill,

Please find enclosed the Laboratory Test Data for the Subject vehicle. It is with the start/stop functional.

If you have any questions or concerns, please contact me.

Thanks guys, and have a great weekend!

Vince Mazaitis

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Fri 11/9/2012 6:34:12 PM  
**Subject:** Decision Information - 2013 Jetta Hybrid

Hello Jim,

We have submitted new fuel economy tests and the Decision Information Request to support a running change for the 2013 Jetta Hybrid, test group DVWXV01.4PHE. This running change introduces a new FEDV to the test group which will represent the fuel economy for all 2013 Jetta Hybrid models from the Start of Production. These new tests require Manufacturer Confirmatory testing of FTP and HWY cycles due to high fuel economy for the ETW and Class. Because of this and due to critical timing of our model launch plans, we are requesting that EPA waive confirmatory testing.

Please contact Mike Giles (248) 754-4227 or Richard Thomas (248) 754-4213 in our office on Monday morning if possible to discuss this request.

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219



**To:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Stendel, Detlef (EASZ/1)" [detlef.stendel@volkswagen.de]; Preuss, Richard (EASZ)" [Richard.Preuss@volkswagen.de]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; inc Wehrly/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Schmidt, Oliver (EEO)"  
**Sent:** Fri 11/9/2012 7:12:23 PM  
**Subject:** Jetta Hybrid

Let us just use the Volkswagen system with the toll free call in number !  
.....

Join by Phone  
+1 (248) 754-6400  
+1 (855) 858-8080  
Find a local number<<https://dialin.vw.com>>

Conference ID: Ex. 6

Hello,

as agreed with Lync, Volkswagen would like to take the opportunity to give the EPA an overview on the improvements on the Fuel Economy that were achieved since the original testing 6 weeks ago.

Hello Jim, hello Lync,

could you please provide a call in number for our colleges from Wolfsburg ?

Thank you

Oliver Schmidt

General Manager  
Engineering and Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Phone: (248) 754-4201  
Cell: (248) 760-6180  
FAX: (248) 754-4207  
E-Mail: [Oliver.Schmidt@vw.com](mailto:Oliver.Schmidt@vw.com)<<mailto:Oliver.Schmidt@vw.com>>

**To:** "Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Stendel, Detlef (EASZ/1)" [detlef.stendel@volkswagen.de]; Preuss, Richard (EASZ)" [Richard.Preuss@volkswagen.de]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; inc Wehrly/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]  
**From:** "Schmidt, Oliver (EEO)"  
**Sent:** Fri 11/9/2012 7:12:23 PM  
**Subject:** Jetta Hybrid

Let us just use the Volkswagen system with the toll free call in number !  
.....

Join by Phone

**Non-Responsive**

Find a local number<<https://dialin.vw.com>>

Conference ID: **Non-Responsive**

Hello,

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Hello Jim, hello Lync,

could you please provide a call in number for our colleges from Wolfsburg ?

Thank you

Oliver Schmidt

General Manager  
Engineering and Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Phone: (248) 754-4201  
Cell: (248) 760-6180  
FAX: (248) 754-4207  
E-Mail: [Oliver.Schmidt@vw.com](mailto:Oliver.Schmidt@vw.com)<<mailto:Oliver.Schmidt@vw.com>>

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 11/12/2012 2:33:07 PM  
**Subject:** RE: Decision Information - 2013 Jetta Hybrid

Hello Jim,

I have just been informed that a meeting is proposed between EPA and Volkswagen representatives to discuss this running change on Tuesday afternoon, Nov. 13th. I would ask that you wait to make your confirmatory test decision until the time of this meeting so all questions can be addressed.

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

From: Rodgers, William (EEO)  
Sent: Friday, November 09, 2012 1:34 PM  
To: Snyder, Jim  
Cc: Giles, Michael; Schlueter, Hannah (EASZ/1); Thomas, Richard (EEO); Kata, Leonard (EEO)  
Subject: Decision Information - 2013 Jetta Hybrid

Hello Jim,

We have submitted new fuel economy tests and the Decision Information Request to support a running change for the 2013 Jetta Hybrid, test group DVWXV01.4PHE. This running change introduces a new FEDV to the test group which will represent the fuel economy for all 2013 Jetta Hybrid models from the Start of Production. These new tests require Manufacturer Confirmatory testing of FTP and HWY cycles due to high fuel economy for the ETW and Class. Because of this and due to critical timing of our model launch plans, we are requesting that EPA waive confirmatory testing.

Please contact Mike Giles (248) 754-4227 or Richard Thomas (248) 754-4213 in our office on Monday morning if possible to discuss this request.

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; im  
Snyder/AA/USEPA/US@EPA[]  
**From:** "Schmidt, Oliver (EEO)"  
**Sent:** Mon 11/12/2012 2:35:33 PM  
**Subject:** RE: Decision Information - 2013 Jetta Hybrid  
[william.rodgers@vw.com](mailto:william.rodgers@vw.com)

Correct,

that is the agreement, Lync and myself made.

Oliver

From: Rodgers, William (EEO)  
Sent: Monday, November 12, 2012 9:33 AM  
To: Snyder, Jim  
Cc: Giles, Michael (EEO); Schlueter, Hannah (EASZ/1); Thomas, Richard (EEO); Kata, Leonard (EEO);  
Schmidt, Oliver (EEO)  
Subject: RE: Decision Information - 2013 Jetta Hybrid

Hello Jim,

I have just been informed that a meeting is proposed between EPA and Volkswagen representatives to discuss this running change on Tuesday afternoon, Nov. 13th. I would ask that you wait to make your confirmatory test decision until the time of this meeting so all questions can be addressed.

Regards,

Bill Rodgers

Emissions Certification Specialist

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com

From: Rodgers, William (EEO)  
Sent: Friday, November 09, 2012 1:34 PM  
To: Snyder, Jim  
Cc: Giles, Michael; Schlueter, Hannah (EASZ/1); Thomas, Richard (EEO); Kata, Leonard (EEO)  
Subject: Decision Information - 2013 Jetta Hybrid

Hello Jim,

We have submitted new fuel economy tests and the Decision Information Request to support a running change for the 2013 Jetta Hybrid, test group DVWXV01.4PHE. This running change introduces a new FEDV to the test group which will represent the fuel economy for all 2013 Jetta Hybrid models from the Start of Production. These new tests require Manufacturer Confirmatory testing of FTP and HWY cycles due to high fuel economy for the ETW and Class. Because of this and due to critical timing of our model launch plans, we are requesting that EPA waive confirmatory testing.

Please contact Mike Giles (248) 754-4227 or Richard Thomas (248) 754-4213 in our office on Monday morning if possible to discuss this request.

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Mon 11/12/2012 4:30:32 PM  
**Subject:** VW Group - Decision Info Audi R8 / R8 Spyder 4.2L

Hello Jim,

Today we submitted decision requests for MY 2013 Audi R8 (FEDV) and R8 Spyder (EDV) with 4.2L engine. This test group is a carryover and the new vehicles have the newer 7 speed automatic transmission .

Please let us know the decision status at your earliest convenience.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Wed 11/14/2012 2:18:28 PM  
**Subject:** Jetta Hybrid Testing

Hello Jim:

When we spoke yesterday, you stated that EPA is primarily interested in the US06 results when we bring the running change Jetta Hybrid in for confirmatory testing. You also mention (and I am paraphrasing) 'if the FTP and HWY are not good, we could use the data from the previous tests.' I just wanted to clarify which previous tests you are speaking about. Would these be the manufacturer's tests on the new running change vehicle, the EPA tests from the previous emission data vehicle, or something that I haven't thought of?

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com



**To:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 11/14/2012 2:32:14 PM  
**Subject:** Re: Jetta Hybrid Testing

The FTP and HWY from the previous EPA tests that were already close.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
Date: 11/14/2012 09:19 AM  
Subject: Jetta Hybrid Testing

Hello Jim:

When we spoke yesterday, you stated that EPA is primarily interested in the US06 results when we bring the running change Jetta Hybrid in for confirmatory testing. You also mention (and I am paraphrasing) 'if the FTP and HWY are not good, we could use the data from the previous tests.' I just wanted to clarify which previous tests you are speaking about. Would these be the manufacturer's tests on the new running change vehicle, the EPA tests from the previous emission data vehicle, or something that I haven't thought of?

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Wed 11/14/2012 2:35:07 PM  
**Subject:** RE: Jetta Hybrid Testing  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[Leonard.Kata@vw.com](mailto:Leonard.Kata@vw.com)  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)  
[leonard.kata@vw.com](mailto:leonard.kata@vw.com)

Okay.

Thanks

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: [leonard.kata@vw.com](mailto:leonard.kata@vw.com)

From: [Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov) [<mailto:Snyder.Jim@epamail.epa.gov>]  
Sent: Wednesday, November 14, 2012 9:32 AM  
To: Kata, Leonard (EEO)  
Cc: Thomas, Richard (EEO)  
Subject: Re: Jetta Hybrid Testing

The FTP and HWY from the previous EPA tests that were already close.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
Date: 11/14/2012 09:19 AM  
Subject: Jetta Hybrid Testing

Hello Jim:

When we spoke yesterday, you stated that EPA is primarily interested in the US06 results when we bring the running change Jetta Hybrid in for confirmatory testing. You also mention (and I am paraphrasing) 'if the FTP and HWY are not good, we could use the data from the previous tests.' I just wanted to clarify which previous tests you are speaking about. Would these be the manufacturer's tests on the new running change vehicle, the EPA tests from the previous emission data vehicle, or something that I haven't thought of?

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Len

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Senior Manager  
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Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 11/14/2012 3:18:20 PM  
**Subject:** VW Group - Supplemental Information

Hello Jim,

I just submitted the supplemental information for the Jetta Hybrid.

Please advise us of the test schedule when it is confirmed. As you are aware we are requesting week of November 26.

Please let me know right away if there are any questions in the process on your end, and we will try to address.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 11/14/2012 9:27:00 PM  
**Subject:** Jetta test date

Bill, we've informed the lab to put the Jetta in the 11/28 slot and the supplemental data was received.  
I'm just waiting for Ben to put the date in Verify.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian (EEO)"  
**Sent:** Fri 11/16/2012 3:38:58 PM  
**Subject:** EPA Surveillance Program AVWXV02.0U5N  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

Hello Lynn,

In regards to our telephone call earlier today:

Our entire in-use group will be leaving for annual meetings and trainings in Germany on December 3rd this year. With the holidays we will unfortunately not be available to assist with any inspections or provide technical assistance during this time.

Any time after the new year would not be a problem at all. We would like to request the start date of the program to be sometime in January 2013, if at all possible. This will ensure our immediate assistance in any issues that may occur, resulting in less of an inconvenience to the customer.

Thank you very much for the consideration.

Best regards,

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
Cell: (248) 736-3487  
FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!



**To:** Sebastian.Berenz@vw.com[]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Lynn Sohacki/OU=AA/O=USEPA/C=US  
**Sent:** Fri 11/16/2012 3:56:15 PM  
**Subject:** Notification of a new in-use surveillance test class S108  
[NOTIF-S-108-Volkswagen.pdf](#)

Dear Sebastian,

Attached is a letter that was sent to your company announcing the selection of an EPA in-use surveillance test class. Please let me know if you have any questions.

Thanks,

Lynn Sohacki  
Environmental Protection Agency  
(734)214-4851  
(734)214-4869 fax



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY  
2565 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF  
AIR AND RADIATION

November 13, 2012

Mr. Sebastian Berenz  
Volkswagen of America  
3800 Hamlin Road  
Auburn Hills, Michigan 48326

Dear Mr. Sebastian:

The Environmental Protection Agency will test a 2010 model-year Volkswagen test-group in our surveillance test-program. The group shown in Enclosure 1 will be tested at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. Test results which exceed applicable standards may lead to confirmatory testing.

A sample of three or more vehicles will be procured. Maintenance will consist of an under-hood inspection and review of on-board computer codes. The federal test procedure and highway cycle will follow a single LA-4 preconditioning cycle. If this test-group contains models which are two wheel drive with selectable four wheel drive or selectable all wheel drive, the vehicles may be tested in either of these modes.

One vehicle may be subjected to an evaporative test per class. Additionally, fault conditions may be introduced on one or more of the vehicles to test the response of the On-Board Diagnostics (OBD) system. If you are aware of OBD enabling criteria which would limit our ability to evaluate these systems, please inform me. Copies of the OBD enabling criteria which were approved during certification should be provided if there are such limitations.

We invite your representatives to be present as observers during the test program. If you have any questions concerning this investigation please contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lynn Sohacki".

Lynn Sohacki  
Compliance Division

Enclosure

ENCLOSURE 1

<u>Lab</u>	NVFEL Ann Arbor, Michigan
<u>Test Group</u>	AVWXV02.0U5N
<u>Estimated Start Date</u>	Week-ending 12/21/12
<u>Recall/Testing Representative</u>	Lynn Sohacki
<u>Telephone Number</u>	(734) 214-4851
<u>E-mail address</u>	Sohacki.lynn@epa.gov
<u>Class Numbers</u>	S108/S109 (low-mileage / high-mileage)

**To:** Lynn Sohacki/AA/USEPA/US@EPA[]  
**From:** "Berenz, Sebastian (EEO)"  
**Sent:** Fri 11/16/2012 4:09:24 PM  
**Subject:** RE: EPA Surveillance Program AVWXV02.0U5N  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
[Sebastian.Berenz@vw.com](mailto:Sebastian.Berenz@vw.com)  
[sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)  
<http://www.volkswagen.com>  
[image001.gif](#)

Hello Lynn,

Thank you very much we would highly appreciate that.

Best regards,

Sebastian Berenz

Manager In-Use Emission Compliance

Engineering Environmental Office

Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326

United States of America

Phone: (248) 754-4211  
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FAX: (248) 754-4207  
E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

From: Sohacki.Lynn@epamail.epa.gov [mailto:Sohacki.Lynn@epamail.epa.gov]  
Sent: Friday, November 16, 2012 11:08 AM  
To: Berenz, Sebastian (EEO)  
Subject: Re: EPA Surveillance Program AVWXV02.0U5N

Hi, Sebastian.

Let me forward this to URS which is responsible for scheduling the classes. I will request a January date for the start of the program and I'll get back to you.

Have a good weekend.

Lynn Sohacki  
Environmental Protection Agency  
734-214-4851  
734-214-4869 (fax)

"Berenz, Sebastian (EEO)" ---11/16/2012 10:39:10 AM---Hello Lynn, In regards to our telephone call earlier today:

From: "Berenz, Sebastian (EEO)" <Sebastian.Berenz@vw.com>  
To: Lynn Sohacki/AA/USEPA/US@EPA  
Date: 11/16/2012 10:39 AM  
Subject: EPA Surveillance Program AVWXV02.0U5N

Hello Lynn,

In regards to our telephone call earlier today:

Our entire in-use group will be leaving for annual meetings and trainings in Germany on December 3rd this year. With the holidays we will unfortunately not be available to assist with any inspections or provide technical assistance during this time.

Any time after the new year would not be a problem at all. We would like to request the start date of the program to be sometime in January 2013, if at all possible. This will ensure our immediate assistance in any issues that may occur, resulting in less of an inconvenience to the customer.

Thank you very much for the consideration.

Best regards,

Sebastian Berenz

Manager In-Use Emission Compliance  
Engineering Environmental Office

Volkswagen Group of America, Inc.  
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Auburn Hills, MI 48326  
United States of America

Phone: (248) 754-4211  
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E-Mail: [sebastian.berenz@vw.com](mailto:sebastian.berenz@vw.com)

<http://www.volkswagen.com>

P Before you print it, think about your responsibility and commitment to the ENVIRONMENT!

**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Wed 11/21/2012 10:09:16 PM  
**Subject:** re: 2011 CAFE Report

Richard,

re: 2011 CAFE Report

I couldn't find your 2011 CAFE model year report(s) in the Document Module of Verify. I looked in Verify for 2011 model year documents in the Compliance Document Type of "CAFE Model Year Report" and couldn't find any 2011 CAFE reports (the CAFE letter(s) to EPA).

When you get a chance, please email me a pdf copy of your 2011 CAFE report(s) for all applicable categories (Import pass car, Domestic pass car and Light Truck) and enter a copy in the Verify Document module.

Thanks

**To:** richard.thomas@vw.com[]  
**Cc:** oliver.schmidt@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]  
**From:** CN=David Good/OU=AA/O=USEPA/C=US  
**Sent:** Wed 11/21/2012 10:09:16 PM  
**Subject:** re: 2011 CAFE Report

Richard,

re: 2011 CAFE Report

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When you get a chance, please email me a pdf copy of your 2011 CAFE report(s) for all applicable categories (Import pass car, Domestic pass car and Light Truck) and enter a copy in the Verify Document module.

Thanks



**To:** Jim Snyder/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; inccent Mazaitis/AA/USEPA/US@EPA[]  
**Cc:** "Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 11/28/2012 6:00:55 PM  
**Subject:** Hybrud Results

Good afternoon gentlemen,

As you are already aware, we are very interested in the numbers for the Hybrid test. If you are able to reply with the preliminary reports as soon as they become available, it would be greatly appreciated.

Thanks,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 11/28/2012 7:23:11 PM  
**Subject:** Re: Hybrid Results  
([embedded image](#))

Results are in Verify. According to my quick calculations, we are done.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
Cc: "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 11/28/2012 01:01 PM  
Subject: Hybrud Results

Good afternoon gentlemen,

As you are already aware, we are very interested in the numbers for the Hybrid test. If you are able to reply with the preliminary reports as soon as they become available, it would be greatly appreciated.

Thanks,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; incent Mazaitis/AA/USEPA/US@EPA;"Rodgers, William (EEO)" [William.Rodgers@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 11/28/2012 7:30:45 PM  
**Subject:** RE: Hybrid Results  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[hannah.schlueter@volkswagen.de](mailto:hannah.schlueter@volkswagen.de)  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[image001.gif](#)

Thanks for the quick turnaround Jim.

When you get a chance, could you also send the PDF of the preliminary report. We are interested in the bag details and State of Charge information which I think is only on this report...

Thanks!

Mike

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, November 28, 2012 2:23 PM  
To: Giles, Michael (EEO)  
Cc: Schlueter, Hannah (EASZ/1); Thomas, Richard (EEO); Mazaitis.Vincent@epamail.epa.gov; Rodgers, William (EEO)  
Subject: Re: Hybrid Results

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Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA

Cc: "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
Date: 11/28/2012 01:01 PM  
Subject: Hybrud Results

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Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

VW JETTA Hybrid r/c EPA confirmatory FE results				
11/27/2012				
	cty	hwy	us06 bg2	
epa	57.487	65.523	54.754	
vw	57.462	66.526	53.1	
	0.04%	-1.53%	3.02%	

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 11/28/2012 7:56:23 PM  
**Subject:** RE: Hybrid Results  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[hannah.schlueter@volkswagen.de](mailto:hannah.schlueter@volkswagen.de)  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[image001.gif](#)

Looking at the table, I am curious, can you tell us if there is a reason to consider only bag 2 below? I think for label they use the weighted number but we were curious about it.

Thanks,

Mike

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, November 28, 2012 2:23 PM  
To: Giles, Michael (EEO)  
Cc: Schlueter, Hannah (EASZ/1); Thomas, Richard (EEO); Mazaitis.Vincent@epamail.epa.gov; Rodgers, William (EEO)  
Subject: Re: Hybrid Results

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United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA

Cc: "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>, "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
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Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

VW JETTA Hybrid r/c EPA confirmatory FE results				
11/27/2012				
	cty	hwy	us06 bg2	
epa	57.487	65.523	54.754	
vw	57.462	66.526	53.1	
	0.04%	-1.53%	3.02%	



**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 11/28/2012 8:47:59 PM  
**Subject:** RE: Hybrid Results  
[VW 2013 jetta hybrid 2nd epa testing.pdf](#)  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[hannah.schlueter@volkswagen.de](mailto:hannah.schlueter@volkswagen.de)  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
(embedded image)

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 11/28/2012 02:56 PM  
Subject: RE: Hybrid Results

Looking at the table, I am curious, can you tell us if there is a reason to consider only bag 2 below? I think for label they use the weighted number but we were curious about it.

Thanks,  
Mike

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Wednesday, November 28, 2012 2:23 PM  
To: Giles, Michael (EEO)  
Cc: Schlueter, Hannah (EASZ/1); Thomas, Richard (EEO); Mazaitis.Vincent@epamail.epa.gov; Rodgers, William (EEO)  
Subject: Re: Hybrid Results

Results are in Verify. According to my quick calculations, we are done.

Jim Snyder  
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From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA, Vincent Mazaitis/AA/USEPA/US@EPA  
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Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

0225

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2013-0048-002			Vehicle ID: VW361 730385/13				
	<b>Test Information</b>		Test Date: 11/28/2012		MFR Name: VOLKSWAGEN		
	Key Start / Hot Soak: 07:23:27 / 09:36				MFR Codes: 590 VWX		
	Fuel Container ID: F00023				Config #: 00		
	Fuel Type: 61 Tier 2 Cert Test Fuel				Transmission: AUTO		
	Test Procedure: 21.04 Fed Fuel 2-day Exhaust (CAN LOAD)				Shift Schedule: A09980005		
	Calculation Method: Gasoline				Beginning Odometer: 007252.0 KM		
Pretest Remarks:					Drive Schedule: flp4bag		
					Soak Period: 18.4 hours		
<b>Bag Data</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>
		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
<b>Phase 1</b>							
	Sample	5.433	20.285	0.511	0.599	2.392	
	Ambient	2.407	0.000	0.014	0.043	1.982	
	Net Concentration	3.133	20.285	0.498	0.557	0.499	2.554
Remarks:							
<b>Phase 2</b>							
	Sample	2.629	1.421	0.017	0.194	2.037	
	Ambient	2.483	0.000	0.012	0.043	1.986	
	Net Concentration	0.182	1.421	0.005	0.152	0.079	0.089
Remarks:							
<b>Phase 3</b>							
	Sample	2.665	2.216	0.041	0.522	2.062	
	Ambient	2.491	0.000	0.015	0.043	1.978	
	Net Concentration	0.271	2.216	0.026	0.481	0.161	0.083
Remarks:							
<b>Phase 4</b>							
	Sample	2.771	1.249	0.028	0.199	2.049	
	Ambient	2.541	0.000	0.018	0.043	1.980	
	Net Concentration	0.268	1.249	0.010	0.156	0.099	0.153
Remarks:							
<b>Results</b>							
		<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
	Phase 1	0.041	0.534	0.019	230.4	0.008	0.033 / 0.035
	Phase 2	0.004	0.060	0.000	100.4	0.002	0.002 / 0.002
	Phase 3	0.004	0.058	0.001	199.0	0.002	0.001 / 0.001
	Phase 4	0.006	0.053	0.001	103.3	0.002	0.003 / 0.003
							(NMOG=1.04xNMHC)
	Weighted	0.01195	0.15586	0.00459	155.467	0.00336	0.0086 / 0.0089
<b>Fuel Economy</b>		<u>Gasoline MPG</u>			<u>Dyno Settings</u>		<u>Dyno #:</u> D329 - FWD
	Phase 1	38.58					Inertia: 3625
	Phase 2	88.78					EPA Set Co A: 4.73
	Phase 3	44.83					EPA Set Co B: 0.0699
	Phase 4	86.34					EPA Set Co C: 0.01464
		<u>1% SOC Limit</u>	<u>Act SOC A-hr</u>	<u>Sys Nom Volts</u>	<u>Charge State</u>		
		0.3935	-0.9878	220.0	Pass		
	Weighted	57.49					Emiss-Bench: Mexa 7200sle


# NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2013-0048-002

Vehicle ID: VW361 730385/13

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
 Phase 1	0.147	1.915	0.070	826.7	0.027	0.119	1.162
Phase 2	0.015	0.229	0.001	384.7	0.007	0.007	
Phase 3	0.013	0.209	0.004	713.4	0.009	0.004	
Phase 4	0.021	0.201	0.002	396.1	0.009	0.012	

### Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.29	29.29	29.29	29.30
Avg Cell Temp (degF)	72.14	72.03	72.36	72.17
Dew Point (degF)	48.78	49.05	48.89	49.03
Specific Humidity (grains/lbm)	52.26	52.79	52.46	52.74
NOx Corr Factor	0.9034	0.9055	0.9042	0.9053
CO2 Dilution Factor	22.292	68.900	25.653	67.35
CFV Vmix (scf @68F)	2863.30	4892.46	2865.03	4888.93

CVS Flow Rate Avg (scfm) 337.32 333.35 337.13 337.13

Fan Placement: One Fan - Up - Front  
Phase Time (secs) 509.30 870.60 509.91 870.10  
Distance (miles) 3.588 3.830 3.584 3.835  
Bag Analysis Time (secs) 143.8 153.7 143.8 155.6

### MFR Test Results

for Procedure 21 Federal fuel 2-day exhaust (w/can load)

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.009	0.15	0.0038	155	0	0.0061

Odometer  
7087 K

MPG  
57.5

MPG is 0.02 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21

Fuel: 61 Tier 2 Cert Gasoline



**CVS**

**Final Laboratory Test Results- Refer to VERIFY Reports for Official Data**

Test Number: 2013-0048-003

Vehicle ID: VW361 730385/13

## Results



	HC-FID	CO	NOx	CO2	CH4	NMHC	Meth Response
	(grams)	(grams)	(grams)	(grams)	(grams)	(grams)	1.162
Phase 1	0.026	1.559	0.093	1395.3	0.013	0.012	

### Test Conditions

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	29.32			
Avg Cell Temp (degF)	71.89			
Dew Point (degF)	49.21			
Specific Humidity (grains/lbm)	53.06			
NOx Corr Factor	0.9065			
CO2 Dilution Factor	19.960			
CFV Vmix (scf @68F)	4282.58			
CVS Flow Rate Avg (scfm)	335.89			

Fan Placement:	One Fan - Up - Front
Phase Time (secs)	765.00
Distance (miles)	10.229
Bag Analysis Time (secs)	

### MFR Test Results

for Procedure 3 HWFE

<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>
1E+07	0.0004	0.073	0.0008	134	0	0.0002

<u>Odometer</u>	<u>MPG</u>
7111 K	66.5

MPG is 1.79 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21  
Fuel: 61 Tier 2 Cert Gasoline

CERT

## NVFEL Laboratory Test Data

CVS

## Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2013-0048-001

Vehicle ID: VW361 730385/13

## Test Information



Test Date: 11/28/2012

MFR Name: VOLKSWAGEN

Key Start: 09:48:26

MFR Codes: 590

VWX

Fuel Container ID: F00023

Config #: 00

Fuel Type: 61 Tier 2 Cert Test Fuel

Transmission: AUTO

Test Procedure: 89 us062bag (us06warmup\_2bagus06)

Shift Schedule: A09980041

Calculation Method: Gasoline

Beginning Odometer: 007316.0 KM

Pretest Remarks:

Drive Schedule: us06warmup\_2bagus06

## Bag Data

	HC-FID	CO	NOx	CO2	CH4	NonMeth HC
Phase 1	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample	2.882	0.172	3.479	0.742	2.056	
Ambient	2.465	0.000	0.034	0.046	1.976	
Net Concentration	0.553	0.172	3.447	0.699	0.190	0.332

Remarks:

## Phase 2

Sample	2.550	0.380	0.798	0.705	1.927	
Ambient	2.500	0.000	0.032	0.046	1.974	
Net Concentration	0.182	0.380	0.768	0.661	0.057	0.116

Remarks:

## Phase 3

Sample	
Ambient	
Net Concentration	

Remarks:

## Phase 4

Sample	
Ambient	
Net Concentration	

Remarks:

## Results

	HC-FID	CO	NOx	CO2	CH4	NMHC / NMOG	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.010	0.006	0.184	394.6	0.004	0.006 / 0.006	22.674
Phase 2	0.001	0.006	0.018	163.0	0.001	0.001 / 0.001	54.880
Composite	0.00327	0.00601	0.05450	214.122	0.00126	(NMOG=1.04xNMHC) 0.0020 / 0.0021	

## Fuel Economy

	Gasoline MPG		Dyno Settings	Dyno #:
Phase 1	22.62			D329 - FWD
Phase 2	54.75			Inertia: 3625
				EPA Set Co A: 4.73
				EPA Set Co B: 0.0699
				EPA Set Co C: 0.01464
		1% SOC Limit	Act SOC A-hr	
		0.2924	0.0836	
		Sys Nom Volts	Charge State	
		220.0	Pass	
Composite	41.71			Emiss-Bench: Mexa 7200sle

v120518 - d329 EPAVDAEm121128092907

Page 1 of 2

Print Time 28-Nov-2012 12:10

# NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2013-0048-001

Vehicle ID: VW361 730385/13

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.017	0.011	0.324	696.3	0.007	0.010	1.162
Phase 2	0.009	0.037	0.111	1016.2	0.003	0.006	



## Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.33	29.33		
Avg Cell Temp (degF)	71.62	72.44		
Dew Point (degF)	48.69	48.84		
Specific Humidity (grains/lbm)	51.99	52.29		
NOx Corr Factor	0.9024	0.9036		
CO2 Dilution Factor	18.045	18.999		
CFV Vmix (scf @68F)	1923.90	2965.71		
CVS Flow Rate Avg (scfm)	487.68	487.51		

Fan Placement: US06 Only - One Large Fan - Up - Front

Phase Time (secs)	130.00	365.00	106.71
Distance (miles)	1.765	6.233	
Bag Analysis Time (secs)	155.6		

## MFR Test Results

for Procedure 90 US06

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.001	0.018	0.0516	205	0	0.0005

Odometer  
7148 K

MPG  
43.5

MPG is 4.29 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21

Fuel: 61 Tier 2 Cert Gasoline



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 11/28/2012 9:42:29 PM  
**Subject:** FTP State of Charge

Hi Jim,

I have to leave the office, but if you have any feedback about the state of charge question this afternoon, please copy Hannah and Richard.

You can also call my phone – Hannah will be here until 6:30 and take any calls.

Thanks again for your help today.

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Rodgers, William (EEO)" [William.Rodgers@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 11/29/2012 4:02:42 PM  
**Subject:** Hybrid Discussion

Hi Jim,

We would like to follow up our discussion about the Hybrid. Here are our current thoughts:

- For the FTP test, if the finding is that the EPA test is technically invalid, is it possible to accept the Mfr test? We would accept this in preference to a re-test.
  
- For the US06 test: After discussion, we have decided to waive the re-test. Therefore, the official FE test is the lower of the confirmatory test and the manufacturer test. We understand this to be based on Hwy portion (Bag 2). The lower Bag 2 result is from the Mfr, therefore this test would be used.
  
- For the Hwy test, there is no issue.

Let's talk when you get a chance to confirm our thoughts.

Thanks

Mike

Michael Giles

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**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA]  
**Cc:** "Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 11/29/2012 4:33:11 PM  
**Subject:** Re: Hybrid Discussion

Yes, The EPA FTP test confirmed the emissions and fuel economy of the Mfr's FTP test. The only issue with the EPA test is the lack of SOC data but we had already confirmed passing SOC from the previous EPA FTP test. Using the Mfr FTP data is acceptable.

The EPA US06 confirmatory test exceeded the MFR's US06 Bag2 (highway portion) FE by 3.02%. Even though it was actually higher than the Mfr FE result, it doesn't confirm it since it is over 3% different. Therefore a retest is in order -or the Mfr can choose to accept the test with the lower result , which is the Mfr's US06 test in this case.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, "Rodgers, William (EEO)" <William.Rodgers@vw.com>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
Date: 11/29/2012 11:02 AM  
Subject: Hybrid Discussion

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United States of America  
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**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** "Schlueter, Hannah (EASZ/1)" [hannah.schlueter@volkswagen.de]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 11/29/2012 4:33:15 PM  
**Subject:** Re: Hybrid Discussion

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To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Schlueter, Hannah (EASZ/1)" <hannah.schlueter@volkswagen.de>, "Rodgers, William (EEO)" <William.Rodgers@vw.com>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
Date: 11/29/2012 11:02 AM  
Subject: Hybrid Discussion

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**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 11/29/2012 4:40:46 PM  
**Subject:** RE: Hybrid Discussion  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[hannah.schlueter@volkswagen.de](mailto:hannah.schlueter@volkswagen.de)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[Richard.Thomas@vw.com](mailto:Richard.Thomas@vw.com)

Thanks for the confirmation Jim!

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, November 29, 2012 11:33 AM  
To: Giles, Michael (EEO); Wehrly.Linc@epamail.epa.gov  
Cc: Schlueter, Hannah (EASZ/1); Thomas, Richard (EEO); Rodgers, William (EEO)  
Subject: Re: Hybrid Discussion

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**To:** Linc Wehrly/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA[]; im  
Snyder/AA/USEPA/US@EPA[]  
**From:** "Schmidt, Oliver (EEO)"  
**Sent:** Fri 11/30/2012 12:25:48 AM  
**Subject:** Jetta Hybrid

Good evening,

I wrote a lot of "Thank you" emails today to the team members of the Jetta Hybrid development team that made the new software available so fast but I would like to take to opportunity to thank the two of you for supporting us in the way you did.

Thank you

Oliver

Oliver Schmidt  
+1 (248) 760-6180  
VWGoA EEO  
Sent by Blackberry

**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** "Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Fri 11/30/2012 3:42:18 PM  
**Subject:** 2011 VOLKSWAGEN Group Final LDT CAFE  
winmail.dat  
CBI\_BVWX\_COMMON\_CAFE\_LDT\_R00.PDF

Hi Dave;

Here is the first 2011 LDT Volkswagen Group CAFE report and it may also be found in Verify. I am still waiting on some financial information regarding CAFE ratio from other departments to complete the 2011 Passenger Car CAFE report and cover letter. I should have it early next week. If you have any questions please contact me directly.

Best regards,  
Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
Engineering and Environmental Office (EEO)  
Phone: 248 754-4213  
Fax: 248 754-4207  
Richard.Thomas@VW.com

CBI\_BVWX\_COMMON\_CAFE\_LDT\_R00.PDF

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[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 11/30/2012 7:35:27 PM  
**Subject:** VW Group - Decision Information for MY 2014 A8 3.0L TDI

Hi Jim,

I just submitted vehicle info, tests and a decision request for a MY 2014 Audi A8 3.0L TDI fuel economy vehicle.

This vehicle is an improved version of the vehicle tested earlier this year at EPA. As before, this vehicle has stop start technology. The vehicle now has software improvements to optimize fuel economy.

Please let us know of your decision at your earliest convenience, or call me if you have any questions.

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

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**To:** David Good/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Schmidt, Oliver (EEO)" [Oliver.Schmidt@vw.com]  
**From:** "Thomas, Richard (EEO)"  
**Sent:** Tue 12/4/2012 11:28:38 AM  
**Subject:** 2011 VOLKSWAGEN Group Final Passenger Car CAFE Report  
winmail.dat  
CBI\_BVWX\_COMMON\_CAFE\_LDV\_R00.PDF

Hello Dave;

Please find attached the 2011 Volkswagen Group Passenger Car Final CAFE. This file has also been uploaded to Verify. If you have any questions please contact me directly.

Best regards,  
Richard

Richard E. Thomas  
VOLKSWAGEN Group of America, Inc.  
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Richard.Thomas@VW.com

CBI\_BVWX\_COMMON\_CAFE\_LDV\_R00.PDF

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Richard

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Fax: 248 754-4207  
[Richard.Thomas@VW.com](mailto:Richard.Thomas@VW.com)

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 12/4/2012 1:46:16 PM  
**Subject:** RE: Hybrid Discussion

Mike, do you think you can pick up the Jetta today? There is a technology fair in the lab tomorrow and they're trying to clear the lab out.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 12/4/2012 2:45:28 PM  
**Subject:** RE: Hybrid Discussion  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Ok, please release it. I'll confirm about pickup today, I had heard it was in the plan already ...

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, December 04, 2012 8:46 AM  
To: Giles, Michael (EEO)  
Subject: RE: Hybrid Discussion

Mike, do you think you can pick up the Jetta today? There is a technology fair in the lab tomorrow and they're trying to clear the lab out.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 12/4/2012 2:52:52 PM  
**Subject:** RE: Hybrid Discussion  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

great, thanks.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**From:** "Giles, Michael (EEO)" <michael.giles@vw.com>  
**To:** Jim Snyder/AA/USEPA/US@EPA  
**Date:** 12/04/2012 09:45 AM  
**Subject:** RE: Hybrid Discussion

Ok, please release it. I'll confirm about pickup today, I had heard it was in the plan already ...

**From:** [Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov) [mailto:[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)]  
**Sent:** Tuesday, December 04, 2012 8:46 AM  
**To:** Giles, Michael (EEO)  
**Subject:** RE: Hybrid Discussion

Mike, do you think you can pick up the Jetta today? There is a technology fair in the lab tomorrow and they're trying to clear the lab out.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** Jim Snyder/AA/USEPA/US@EPA;Vincent Mazaitis/AA/USEPA/US@EPA[]; inccent Mazaitis/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 12/4/2012 4:00:23 PM  
**Subject:** RE: Hybrid Discussion  
[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)  
<mailto:Snyder.Jim@epamail.epa.gov>  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Jim / Vince,

Just to confirm, Brian will be there around 3 or 3:30 to drop off a Beetle for the fair and pick up the Jetta Hybrid.

From: Giles, Michael (EEO)  
Sent: Tuesday, December 04, 2012 9:45 AM  
To: 'Snyder.Jim@epamail.epa.gov'  
Subject: RE: Hybrid Discussion

Ok, please release it. I'll confirm about pickup today, I had heard it was in the plan already ...

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Tuesday, December 04, 2012 8:46 AM  
To: Giles, Michael (EEO)  
Subject: RE: Hybrid Discussion

Mike, do you think you can pick up the Jetta today? There is a technology fair in the lab tomorrow and they're trying to clear the lab out.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Wed 12/5/2012 3:30:57 PM  
**Subject:** 2014 Certificate Requests - Audi R8 / Lamborghini Gallardo

Hello Jim,

I have uploaded the Initial Applications and submitted Certificate Requests for the following 2014 model year Audi test groups. These are both carryover test groups with new fuel economy and worst case emissions data for all Audi R8 models, the Lamborghini Gallardo 5.2L (FEDV) models continue to use data carried over from previous model years.

- EAD XV04.2375 – 2014 Audi R8 V8 models
- EAD XV05.2LR8 – 2014 Audi R8 V10 and Lamborghini Gallardo models

The 2014 VW Group Certification Preview and Pre Model Year GHG report is forthcoming in the coming weeks, we will contact you to arrange a meeting on these topics. In the meantime, we would appreciate your review of the submitted 2014 applications to expedite the processing of these certificates after we have completed our preview meeting with you.

Regards,

Bill Rodgers

Emissions Certification Engineer

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

(248) 754-4219

william.rodgers@vw.com



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Tue 12/11/2012 9:47:32 PM  
**Subject:** FW: A8 Security

Hello Jim,

Our Audi factory in Neckarsulm is asking us about the possibility of certifying an armored version of the A8 for the US with the 4.0L V8 engine. They gave us sparse details so far, but the initial question was if it could be included with an existing passenger car test group. The text of the inquiry was as follows:

"... Audi sales is asking for the possibility to bring a A8 armored version to the U.S.

They want to use the V8 TFSI in this version. Unfortunately the min weight would be approx. 8047lbs, maximum weight would be 9370lbs.

Is there a chance to cover this version with the V8 TFSI test group?

We used the worst case variant for FE & emissions (Bentley GT/GTC) already and the max inertia weight class for PC is 5500lbs anyway.

However, the A8 armored would be heavier..."

After some checking of the regulations (see for example definitions in 86.1803), our thoughts were as follows:

- There seems to be no specific upper weight limit on classification of vehicles as "LDV", however the definition for HDV states "... any vehicle 8,500# GVWR or > 6,000 curb weight...". Therefore, we believe the vehicle would need to be certified as an HDV, or possibly a MDPV/HDV if the GVWR is less than 10,000#. It was not clear from the description if we move over into HDV only but it seems possible .
- HDV's have the option to be tested on a dyno if < 14,000# GVWR (as opposed to testing engine only which is also an option).
- We believe any HDV or MDPV/HDV would need to be classified in their own test group separate

from any LDV's.

- Any MDPV /HDV fleet emissions would likely need to be included with LDT4 for fleet average NOx, GHG, CAFÉ.
- OBD could most likely be based on the existing/similar LDV OBD group. However, the requirements would also be less stringent for the HDV class.

Could you let us know your feedback on our assumptions above, or if you notice anything we may have overlooked at this early stage.

Best Regards,

Mike

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 12/13/2012 10:39:03 PM  
**Subject:** Re: FW: A8 Security

Hi Mike, I've been looking into this since and conferring with colleagues since don't normally deal with Heavy Duty. I think you are on the right track. I had some comments below. Can you clarify, are you referring to curb, test weight or ALVW in your comments? I assumed curb weight. Is Audi interested in keeping this in the existing test group?

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>, "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
Date: 12/11/2012 04:49 PM  
Subject: FW: A8 Security

Hello Jim,

Our Audi factory in Neckarsulm is asking us about the possibility of certifying an armored version of the A8 for the US with the 4.0L V8 engine. They gave us sparse details so far, but the initial question was if it could be included with an existing passenger car test group. The text of the inquiry was as follows:

"... Audi sales is asking for the possibility to bring a A8 armored version to the U.S. They want to use the V8 TFSI in this version. Unfortunately the min weight would be approx. 8047lbs, maximum weight would be 9370lbs.  
Is there a chance to cover this version with the V8 TFSI test group?  
We used the worst case variant for FE & emissions (Bentley GT/GTC) already and the max inertia weight class for PC is 5500lbs anyway.  
However, the A8 armored would be heavier..."

After some checking of the regulations (see for example definitions in 86.1803), our thoughts were as follows:

- There seems to be no specific upper weight limit on classification of vehicles as "LDV", however the definition for HDV states "... any vehicle 8,500# GVWR or > 6,000 curb weight...". Therefore, we believe the vehicle would need to be certified as an HDV, or possibly a MDPV/HDV if the GVWR is less



than 10,000#. It was not clear from the description if we move over into HDV only but it seems possible . I found an unofficial reference to a LDV weight limit of 5750 but haven't found that in the CFR. I don't think that is correct and I'm not convinced the ">6,000 curb weight" applies to LDV either. That said, I think this could qualify as a MDPV if under 10,000# GVW. Otherwise as a HDV if the GVW is over 10,000. Do you know the GVW yet?

- HDV's have the option to be tested on a dyno if < 14,000# GVWR (as opposed to testing engine only which is also an option).
- We believe any HDV or MDPV/HDV would need to be classified in their own test group separate from any LDV's. Whether its a LDV, MDPV or HDV, I don't see anything in the regs preventing you from including it in the existing test group if it met the same LDV Bin level emissions and OBD requirements. It would be a new worst case EDV.
- Any MDPV /HDV fleet emissions would likely need to be included with LDT4 for fleet average NOx, GHG, CAFÉ. Probably, I haven't looked into this much.
- OBD could most likely be based on the existing/similar LDV OBD group. However, the requirements would also be less stringent for the HDV class.

Could you let us know your feedback on our assumptions above, or if you notice anything we may have overlooked at this early stage.

Best Regards,  
Mike

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Thur 12/13/2012 10:56:02 PM  
**Subject:** 2014MY Certification Preview

Hi Jim:

The Volkswagen Group 2014MY Certification Preview material should be submitted to EPA tomorrow. If possible, we would like to meet with you to discuss. Would you have any time available early next week? It would be nice to complete this task before the holidays.

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: leonard.kata@vw.com

**To:** CN=Bill Pidgeon/OU=AA/O=USEPA/C=US@EPA;CN=Chris  
 Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA  
 Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
 Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc  
 Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom  
 Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[];  
 N=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA  
 Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
 Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc  
 Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom  
 Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[];  
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 Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[];  
 N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel  
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 Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[];  
 N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc  
 Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom  
 Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[];  
 Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom  
 Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[];  
 N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom  
 Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[];  
 N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William  
 Ott/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA[]  
**Cc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 12/13/2012 11:24:24 PM  
**Subject:** VW Pre-Cert Mtg

**To:** CN=Bill Pidgeon/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA[]

**Cc:** []

**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US

**Sent:** Thur 12/13/2012 11:24:24 PM

**Subject:** VW Pre-Cert Mtg

**To:** CN=Bill Pidgeon/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=DavidA Wright/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Dalton/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; Leonard.Kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=William Ott/OU=AA/O=USEPA/C=US@EPA[]; N=William Ott/OU=AA/O=USEPA/C=US@EPA[]

**Cc:** []

**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US

**Sent:** Thur 12/13/2012 11:24:24 PM

**Subject:** VW Pre-Cert Mtg

**To:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Thur 12/13/2012 11:27:37 PM  
**Subject:** Re: 2014MY Certification Preview

Well I scheduled it but so far all I could get was our room with the round table. Don't wear a heavy sweater that day.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 12/13/2012 05:56 PM  
Subject: 2014MY Certification Preview

Hi Jim:

The Volkswagen Group 2014MY Certification Preview material should be submitted to EPA tomorrow. If possible, we would like to meet with you to discuss. Would you have any time available early next week? It would be nice to complete this task before the holidays.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Fri 12/14/2012 1:00:50 PM  
**Subject:** RE: FW: A8 Security  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[michael.giles@vw.com](mailto:michael.giles@vw.com)  
[William.Rodgers@vw.com](mailto:William.Rodgers@vw.com)  
[Leonard.Kata@vw.com](mailto:Leonard.Kata@vw.com)

Thanks for the quick reply Jim.

We don't have weight details yet. But, it seems Audi is interested in keeping this in an existing test group, so it is good to hear that it may be possible. We will follow up when we get more info.

Mike

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Thursday, December 13, 2012 5:39 PM  
To: Giles, Michael (EEO)  
Cc: Kata, Leonard (EEO); Rodgers, William (EEO)  
Subject: Re: FW: A8 Security

Hi Mike, I've been looking into this since and conferring with colleagues since don't normally deal with Heavy Duty. I think you are on the right track. I had some comments below. Can you clarify, are you referring to curb, test weight or ALVW in your comments? I assumed curb weight. Is Audi interested in keeping this in the existing test group?

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Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>, "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>

Date: 12/11/2012 04:49 PM  
Subject: FW: A8 Security

Hello Jim,

Our Audi factory in Neckarsulm is asking us about the possibility of certifying an armored version of the A8 for the US with the 4.0L V8 engine. They gave us sparse details so far, but the initial question was if it could be included with an existing passenger car test group. The text of the inquiry was as follows:

"... Audi sales is asking for the possibility to bring a A8 armored version to the U.S. They want to use the V8 TFSI in this version. Unfortunately the min weight would be approx. 8047lbs, maximum weight would be 9370lbs. Is there a chance to cover this version with the V8 TFSI test group? We used the worst case variant for FE & emissions (Bentley GT/GTC) already and the max inertia weight class for PC is 5500lbs anyway. However, the A8 armored would be heavier..."

After some checking of the regulations (see for example definitions in 86.1803), our thoughts were as follows:

- There seems to be no specific upper weight limit on classification of vehicles as "LDV", however the definition for HDV states "... any vehicle 8,500# GVWR or > 6,000 curb weight...". Therefore, we believe the vehicle would need to be certified as an HDV, or possibly a MDPV/HDV if the GVWR is less than 10,000#. It was not clear from the description if we move over into HDV only but it seems possible. I found an unofficial reference to a LDV weight limit of 5750 but haven't found that in the CFR. I don't think that is correct and I'm not convinced the ">6,000 curb weight" applies to LDV either. That said, I think this could qualify as a MDPV if under 10,000# GVW. Otherwise as a HDV if the GVW is over 10,000. Do you know the GVW yet?
- HDV's have the option to be tested on a dyno if < 14,000# GVWR (as opposed to testing engine only which is also an option).
- We believe any HDV or MDPV/HDV would need to be classified in their own test group separate from any LDV's. Whether its a LDV, MDPV or HDV, I don't see anything in the regs preventing you from including it in the existing test group if it met the same LDV Bin level emissions and OBD requirements. It would be a new worst case EDV.
- Any MDPV /HDV fleet emissions would likely need to be included with LDT4 for fleet average NOx, GHG, CAFÉ. Probably, I haven't looked into this much.
- OBD could most likely be based on the existing/similar LDV OBD group. However, the requirements would also be less stringent for the HDV class.

Could you let us know your feedback on our assumptions above, or if you notice anything we may have overlooked at this early stage.

Best Regards,  
Mike





To: Jim Snyder/AA/USEPA/US@EPA[]

Cc: Ex. 7 @arb.ca.gov; Ex. 7 @arb.ca.gov; Ex. 7

Ex. 7

Ex. 7

From: Ex. 7

Sent: Fri 12/14/2012 1:47:02 PM

Subject: Volkswagen Group 2014 Certification Preview

Hello Jim,

On behalf of the Volkswagen Group, we have submitted our 2014 Certification Preview letter to the Verify system for your review. This letter was also submitted to the California ARB DMS system for their review. We are requesting that our ARB Certification representative, Ex. 7 be allowed to call into the preview meeting currently being arranged at EPA for Wednesday, Dec 19th at 1:00PM EST (10AM Pacific).

Please contact Ex. 7 when a conference room has been decided so a call in number can be established.

Regards,

**Ex. 7**

VOLKSWAGEN GROUP OF AMERICA, INC.

Engineering and Environmental Office

Auburn Hills, MI

**Ex. 7**

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Fri 12/14/2012 3:30:30 PM  
**Subject:** RE: 2014MY Certification Preview  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)  
[Leonard.Kata@vw.com](mailto:Leonard.Kata@vw.com)  
[leonard.kata@vw.com](mailto:leonard.kata@vw.com)

Hi Jim:

Thanks for the info. Our numbers will be limited (1 or 2).

By the way, I haven't set this up yet, but would you have any objection to ARB Ex. 7 listening in by telephone?

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: [leonard.kata@vw.com](mailto:leonard.kata@vw.com)

From: [Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov) [<mailto:Snyder.Jim@epamail.epa.gov>]  
Sent: Thursday, December 13, 2012 6:28 PM

To: Kata, Leonard (EEO)  
Subject: Re: 2014MY Certification Preview

Well I scheduled it but so far all I could get was our room with the round table. Don't wear a heavy sweater that day.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 12/13/2012 05:56 PM  
Subject: 2014MY Certification Preview

Hi Jim:

The Volkswagen Group 2014MY Certification Preview material should be submitted to EPA tomorrow. If possible, we would like to meet with you to discuss. Would you have any time available early next week? It would be nice to complete this task before the holidays.

Best regards,

Len

---

Leonard W. Kata  
Senior Manager  
Emission Regulations and Certification  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
Phone: (248) 754-4204  
Cell: (248) 797-3886  
E-Mail: leonard.kata@vw.com

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Giles, Michael (EEO)" [michael.giles@vw.com]; Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 12/17/2012 4:32:44 PM  
**Subject:** 2012 Final Common Section Extension Request

Hello Jim,

We have uploaded a request for approval letter for your consideration regarding a 90-day extension of our 2012 Final Common Section submission. Please review and provide approval at your earliest convenience.

Regards,

Bill Rodgers

VWGoA EEO

(248) 754-4219

**To:** "Rodgers, William" [William.Rodgers@vw.com]  
**Cc:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 12/17/2012 8:23:59 PM  
**Subject:** Fw: bev and PHEV spreadsheets  
[Derived 5cyl EV MPG 06 23 11.xls](#)  
[Sample PHEV.xls](#)

Bill, at a previous meeting someone asked if we had a spreadsheet calculator for PHEVs and EVs. Here's what we have. They aren't very polished yet. I think it was Peter or Klaus that asked. Can you forward it to the right person?  
Thanks.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

## Derived 5-cycle MPG Calculations For Electric Vehicles

### I. Calculate Electric vehicle FE Label city, Hwy, Combined FE values using the 2007 (90% & 78%) method and the 2008 (derived 5-cycle) method:

Enter unadjusted kW-hr/100mi Values (in red text blocks) as determined from SAE J1634:

	City mpg (round to 0.1mpg)	Hwy mpg (round to 0.1mpg)	Calculated unadjusted combined Units	2007 FE Label method			2008 FE Label method (Derived 5-cycle)			
				Adjusted City Fuel Economy	Adjusted Hwy Fuel Economy	Adjusted Combined Fuel Econ Units	Derived 5- cycle City	Derived 5- cycle Hwy	Adjusted Combined Units	
Elect veh FE kW-hr/100 mi	20.0000	25.0000	22.3kW-hr/100 mi	22.2	32.1	25.8				
Elect veh FE converted to mpg	168.5	134.8	151.5mpg	151.8	105	126.4mpg				
							Calculate derived 5-cycle mpg:	97.4	88.0	92.9mpg
							convert back to kW-hr/100 mi:	34.6	38.3	36.3 kW-hr/100 mi
							Percent adjustment mpg:	42.2%	34.7%	38.7% percent
							MPG w/ 30% Cap	118.0	94.4	106.1
							convert back to kW-hr/100 mi:	28.6	35.7	31.8 kW-hr/100 mi @ 30 % Cap
										31.8

### II. Calculate Electric vehicle driving ranges using the unadjusted SAE J1634 method, the 2007 (90% & 78%) method and the 2008 (derived 5-cycle) method:

Enter unadjusted City & Hwy Range Values in miles (in red text blocks) as determined from SAE J1634:

	City Range	Hwy Range	Combined Range	Rounded Range	Units	Method:
Calculate unadjusted driving range:	100	90	95.5000	96	miles	Unadjusted (SAE J1634)
Calculate adjusted driving range (2007 method):	90.0	70.2	81.0900	81	miles	2007 (90% & 78%)
Calculate adjusted driving range (2008 method, No Cap):	57.8	58.8	58.5607	59	miles	2008 (derived 5-cycle, mpg-based, No Cap)
Calculate adjusted driving range (2008 method, 30% Cap):	70.0	63.0	66.8500	67	miles	2008 (derived 5-cycle, mpg-based, 30% Cap)

### III. Calculate Electric vehicle annual fuel cost when paying \$.10/kw-hr and \$.20 per kw-hr for electricity using the 2007 (90% & 78%) method and the 2008 (derived 5-cycle) method:

#### 2008 MPG Factors:

ref. 40 CFR 600.210-08

City Intercept:	0.00326
City Slope:	1.1805
Hwy Intercept:	0.00138
Hwy Slope:	1.3466

Petroleum Equivalency Factor  
for electricity; ref 10 CFR 474.3

33,705watt-hr/gallon w/o 6.667 CAFE incentive  
no fuel fired accessories

Enter U.S. electricity costs (in red text blocks):

	Cost	Units	Fuel Cost*	Method
U.S. approx minimum:	\$0.10	per kw-hr	\$387.00	2007 (90% & 78%)
U.S. approx maximum:	\$0.20	per kw-hr	\$774.00	2007 (90% & 78%)
U.S. approx minimum:	\$0.10	per kw-hr	\$544.50	2008 (derived 5-cycle, mpg-based, No Cap)
U.S. approx maximum:	\$0.20	per kw-hr	\$1,089.00	2008 (derived 5-cycle, mpg-based, No Cap)
U.S. approx minimum:	\$0.10	per kw-hr	\$477.00	2008 (derived 5-cycle, mpg-based, 30% Cap)
U.S. approx maximum:	\$0.20	per kw-hr	\$954.00	2008 (derived 5-cycle, mpg-based, 30% Cap)

\*Note: Annual fuel costs should be ASTM rounded to a whole dollar.

PHEV CD-FE results						City-CD
	No	Long Name		Calculation	unit	Conf 00
Test Results	(1)	Transition cycle	n	-		3
	(2)	The cycle of 1st Engine start		-		2
	(3)	Phase included Transition cycle		-		3,4
	(4)	Recharge Event Energy (kiloWatt-hours)		-	kW·h	3.0521
	(5)	<b>Rcda</b> Charge Depleting Range (Actual miles)		-	mile	17.040
	(6)	SOCst	@n-1	-	%	53.300
	(7)	SOCend		-	%	28.600
	(8)	SOCst.	@n	-	%	28.600
	(9)	SOCend		-	%	21.500
	(10)	Distance	@Phase1{@n-2}	-	mile	-
	(11)	Fuel Economy		-	mpg	-
	(12)	Distance	@Phase2{@n-2}	-	mile	-
	(13)	Fuel Economy		-	mpg	-
	(14)	Distance	@Phase3{@n-1}	-	mile	3.5950
	(15)	Fuel Economy		-	mpg	118.160
	(16)	Distance	@Phase4{@n-1}	-	mile	3.8560
	(17)	Fuel Economy		-	mpg	28193.660
FE Calculation	Electricity	(A)	ECcd	= (4) / (5)	kW-h/mile	0.17911
		(B)	MPGe	= 33.705 / (A)	MPGe	188.17640
	Gasoline	(C)	ΔSOC	@n-1 = (6) - (7)	%	24.700
		(D)	ΔSOC	@n = (8) - (9)	%	7.100
		(E)	Zn	= (D) / (C)		0.28745
		(F)	Yn-1	= (14) / (15) + (16) / (17)	gal	0.03056
		(G)	SIGMA Yi(i=1 to n-1)	= ( (10) / (11) + (12) / (13) ) + (F)	gal	0.03056
		(H)	MPG	= (5) / ( (G) + (E) x (F) )	MPG	433.07500
	Combine (MPGe and MPG)	(J)	Combine MPGe and MPG	= 1 / ( ( 1 / (B) ) + ( 1 / (H) ) )	MPGe	131.17797
		(L)	derived 5cycle adjustment (70% cap)	= K (City) * 0.7 = K (HWY) * 0.7	MPGe	91.82458
	Combine (City and Hwy)	(M)	Combined FE	= 1 / ( (0.55 / CityMPG) + (0.45 / HwyMPG) )	MPGe	96.59712

Fuel Consumption Rate	Electricity	(N)	Conf. Results		kW-h/mile	0.17911
		(O)	Convert to kW-h/100miles	= (N) * 100	kW-h/100miles	17.91138
		(P)	Derived 5cycle adjustment (70% cap)	= (O) / 0.7	kW-h/100miles	25.58769
		(Q)	Combined City and Hwy	= 0.55 * (P) City + 0.45 * (P) Hwy	kW-h/100miles	28.77735
	Gasoline	(R)	Conf. Results		mpg	433.07500
		(S)	Derived 5cycle adjustment (70% cap)	= (R) * 0.7	mpg	303.15250
		(T)	Combined City and Hwy	= 1 / ( (0.55 / CityMPG) + (0.45 / HwyMPG) )	mpg	551.18636
		(U)	Gasoline consumption rate	= 100 / (T)	gal/100miles	0.18143

Driving Range	Rcda	(V)	Conf. Results		miles	17.040
		(W)	Derived 5cycle adjustment (70% cap)	= (V) * 0.7	miles	11.928
		(X)	Combined City and Hwy	= 0.55 * (W) City + 0.45 * (W) Hwy	miles	10.59839
	All Electric Range	(Y)	Distance before engine starts	Calculated from Techstream data	miles	8.2855
		(Z)	Conf. Results		miles	8.2855
		(AA)	Derived 5cycle adjustment (70% cap)	= (Z) * 0.7	miles	5.79985
		(AB)	Combined City and Hwy	= 0.55 * (AA) City + 0.45 * (AA) Hwy	miles	6.42049

Fuel Cost of CD mode	Electricity	(AC)	Convert fuel consumption to miles/kW-h	= 1 / (N)	miles/kW-h	5.58304
		(AD)	Derived 5cycle adjustment (70% cap)	= (AC) * 0.7	miles/kW-h	3.90813
		(AE)	Electricity cost	= \$0.12 / (AD)	\$/mile	0.03071
	Gasoline	(AF)	Gasoline cost	= \$3.7 / (S)	\$/mile	0.01221
	Electricity + Gasoline	(AG)	Total cost	= (AE) + (AF)	\$/mile	0.04291
Fuel Cost of CS mode	Gasoline	(AH)	Fuel economy value	Calculated from CS mode tests	mpg	50.5282
		(AI)	Gasoline cost	= \$3.7 / (AH)	\$/mile	0.07323
Annual fuel cost	UF	(AJ)	MDIUF	Calculated in "UF" sheet		0.32
	CD CS composite	(AK)	CD and CS composite	= (AG) * UF + (AI) * (1 - UF)	S/mile	0.06353



cost	Combined City and Hwy	(AL)	Combined City and Hwy		$= (0.55 * (AK) City + 0.45 * (AK) Hwy) * 15000$	\$/year	974.65316
		(AM)	Rounding to the nearest \$50		$= \text{round}(\text{Annual fuel cost} / 50, 0) * 50$	\$/year	950
		(AN)	5year fuel saving		$= 12600 - (AM) * 5$	\$	7850

nd CS combined FE	CD CS composite	(AO)	CD and CS composite		$1 / [UF / CD \text{ MPGe} + (1 - UF) / CS \text{ MPG}]$	MPGe	59.02234
	Combined City and Hwy	(AP)	Combined City and Hwy		$= 1 / ((0.55 / \text{CityMPGe}) + (0.45 / \text{HwyMPGe}))$	MPGe	57.68576

HWY-CD
Conf 00
2
2
-
2.9321
12.819
-
-
-
-
-
-
-
-
-
-
-
-
-
0.22873
147.35664
-
-
-
-
-
-
147.35664
103.14965

0.22873
22.87308
32.67583
Infinity
Infinity

12.819
8.9733
10.2558
10.2558
7.17906

4.37195
3.06037
0.03921
0
0.03921
48.7284
0.07593
0.25
0.06675



TABLE 5 OF § 600.116–12—CITY/HIGHWAY SPECIFIC UTILITY FACTOR COEFFICIENTS

	FUF		MDIUF	City
	Coefficients for City	Coefficients for Hwy	City/Hwy	Rcda
1	14.86	4.8	13.10	12.15
2	2.965	13	-18.70	12.15
3	-84.05	-65	5.22	12.15
4	153.7	120	8.15	12.15
5	-43.59	-100	3.53	12.15
6	-96.94	31	-1.34	12.15
7	14.47		-4.01	12.15
8	91.7		-3.90	12.15
9	-46.36		-1.15	12.15
10			3.88	12.15
Normarized Distance	399	399	399	UF (cumulative)

MDIUF City
0.3989097744
-0.0173399712
0.0001473943
0.0000070076
0.0000000924
-0.0000000011
-0.0000000001
0.0000000000
0.0000000000
0.0000000000
0.0000000000

0.317316754537779

Hwy

Rcda	MDIUF City
9.1	0.2987719298
9.1	-0.0097269929
9.1	0.0000619264
9.1	0.0000022051
9.1	0.0000000218
9.1	-0.0000000002
9.1	0.0000000000
9.1	0.0000000000
9.1	0.0000000000
9.1	0.0000000000
9.1	0.0000000000

UF

(cumulative)

0.251069499900382

PHEV CD-FE results						
City						
	No	Long Name		Calculation	unit	Conf 00
Test Results		Transition cycle	n	-		3
		The cycle of 1st Engine start		-		2
		Phase included Transition cycle		-		3,4
		Recharge Event Energy (kiloWatt-hours)		-	kW·h	3.0521
		<b>Rcda</b> Charge Depleting Range (Actual miles)		-	mile	17.040
		SOCst	@n-1	-	%	53.300
		SOCend		-	%	28.600
		SOCst.	@n	-	%	28.600
		SOCend		-	%	21.500
		Distance	@Phase1(@n-2)	-	mile	-
		CO2		-	g/mile	0.000
		Distance	@Phase2(@n-2)	-	mile	-
		CO2		-	g/mile	0.000
		Distance	@Phase3(@n-1)	-	mile	3.5950
		CO2		-	g/mile	73.602
		Distance	@Phase4(@n-1)	-	mile	3.8560
		CO2		-	g/mile	0.311
		Distance	@Phase5(@n)	-	mile	3.589
		CO2		-	g/mile	116.439
		Distance	@Phase6(@n)	-	mile	3.854
		CO2		-	g/mile	90.633

HWY			
	Calculation	unit	Conf 00
n	-		2
	-		2
	-		-
	-	kW·h	2.9321
	-	mile	12.819
@n-1	-	%	-
	-	%	-
@n	-	%	-
	-	%	-
@Phase1(@n-1)	-	mile	-
	-	g/mile	0.000
@Phase2(@n)	-	mile	-
	-	g/mile	103.985
	-	mile	-
	-	g/mile	-
	-	mile	-
	-	g/mile	-
		mile	
		g/mile	
		mile	
		g/mile	

CO2 calcation			Averaging 3 conf. Result	@Phase1(@n-2)		g/mile	0.000		
				@Phase2(@n-2)		g/mile	0.000		
				@Phase3(@n-1)		g/mile	73.602		
				@Phase4(@n-1)		g/mile	0.311		
				@Phase5(@n)		g/mile	116.439		
				@Phase6(@n)		g/mile	90.633	MDIUF	UF*CO2
			Derived 5cycle adjustment (70% cap)	@Phase1(@n-2)	(CO2 g/mile)/0.7	g/mile	0	0.080	0.000
				@Phase2(@n-2)	(CO2 g/mile)/0.7	g/mile	0	0.080	0.000
				@Phase3(@n-1)	(CO2 g/mile)/0.7	g/mile	105.14604	0.060	6.309
				@Phase4(@n-1)	(CO2 g/mile)/0.7	g/mile	0.44458	0.060	0.027
				@Phase5(@n)	(CO2 g/mile)/0.7	g/mile	166.34160	0.050	8.317
				@Phase6(@n)	(CO2 g/mile)/0.7	g/mile	129.47587	0.050	6.474
			sigma[UFi*(CD CO2 phase i)]			g/mile	21.126	0.380	21.126
	CD CS composite		Yufw		sigma[UFi*(CD CO2 phase i)]+(1-UF)*(CS CO2)	g/mile	128.944		

@Phase1(@n-1)		g/mile	0.000		
@Phase2(@n)		g/mile	103.985		
				MDIUF	UF*CO2
@Phase1(@n-1)	(CO2 g/mile)/0.7	g/mile	0	0.21	0.000
@Phase2(@n)	(CO2 g/mile)/0.7	g/mile	148.54966	0.16	23.768
		g/mile	23.768	0.370	23.768
	sigma[UFi*(CD CO2 phase i)]+(1-UF)*(CS CO2)	g/mile	137.735		

Combined City Hwy CO2				0.55*Yufw(City) + 0.45*Yufw(Hwy)	g/mile	132.90010
-----------------------------	--	--	--	----------------------------------	--------	-----------



**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Rodgers, William (EEO)"  
**Sent:** Mon 12/17/2012 8:29:30 PM  
**Subject:** RE: bev and PHEV spreadsheets  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Sure. That would have been Richard Thomas and Hannah Schlueter.

Bill

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]  
Sent: Monday, December 17, 2012 3:24 PM  
To: Rodgers, William (EEO)  
Cc: Kata, Leonard (EEO)  
Subject: Fw: bev and PHEV spreadsheets

Bill, at a previous meeting someone asked if we had a spreadsheet calculator for PHEVs and EVs. Here's what we have. They aren't very polished yet. I think it was Peter or Klaus that asked. Can you forward it to the right person?  
Thanks.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)



**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 12/17/2012 8:37:23 PM  
**Subject:** RE: bev and PHEV spreadsheets  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Ah, thanks, my notes weren't clear.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Date: 12/17/2012 03:29 PM  
Subject: RE: bev and PHEV spreadsheets

Sure. That would have been Richard Thomas and Hannah Schlueter.  
Bill

From: [Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov) [mailto:[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)]  
Sent: Monday, December 17, 2012 3:24 PM  
To: Rodgers, William (EEO)  
Cc: Kata, Leonard (EEO)  
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**To:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Mon 12/17/2012 8:40:33 PM  
**Subject:** Re: 2012 Final Common Section Extension Request  
2012 Final Common Section req for extension.pdf

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Rodgers, William (EEO)" <William.Rodgers@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Giles, Michael (EEO)" <michael.giles@vw.com>, "Kata, Leonard (EEO)" <Leonard.Kata@vw.com>  
Date: 12/17/2012 11:32 AM  
Subject: 2012 Final Common Section Extension Request

Hello Jim,  
We have uploaded a request for approval letter for your consideration regarding a 90-day extension of our 2012 Final Common Section submission. Please review and provide approval at your earliest convenience.

Regards,  
Bill Rodgers  
VWGoA EEO  
(248) 754-4219

# VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder  
Compliance and Innovative Strategies Division  
Office of Mobile Sources  
U. S. Environmental Protection Agency  
2000 Traverwood Drive  
Ann Arbor, MI 48105

Leonard W. Kata Name  
Manager – Emis. Cert. Title  
EEO Department  
248-754-4204 Phone  
248-754-4207 Fax  
leonard.kata@vw.com E-Mail

December 17, 2012 Date

Subject: Request for Extension of Model Year 2012 Volkswagen Group Common Sections Submittal.

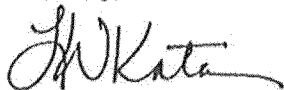
Dear Mr. Snyder,

We are requesting an extension of up to 90 days, as allowed by regulation, for the submission of the Volkswagen Group model year 2012 Common Sections. This request is necessary to allow us to add the final sales figures for the 2012 model year. All other model year 2012 applications will be submitted by the December 31, 2012 deadline. We will submit the 2012 Common Sections with as short of a delay as possible.

VOLKSWAGEN GROUP OF AMERICA, INC.  
3800 HAMLIN ROAD  
AUBURN HILLS, MI 48326  
PHONE +1 248 754 5000

If you have any questions with regard to this request, please contact our office in Auburn Hills at (248)754-4219.

Sincerely,



Leonard W. Kata  
Volkswagen Group of America, Inc.

REVIEWED AND ACCEPTED  
DATE 12/17 EPA REP JJS

Engineering and Environmental Office

Enclosure(s)

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Giles, Michael (EEO)" [michael.giles@vw.com]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Mon 12/17/2012 8:46:31 PM  
**Subject:** Accepted: VW Pre-Cert Mtg Rm C126

**To:** Jim Snyder/AA/USEPA/US@EPA; [Ex. 7]@arb.ca.gov];  
[Ex. 7]@arb.ca.gov]; inc Wehrly/AA/USEPA/US@EPA[]  
**Cc:** [Ex. 7]  
**From:** [Ex. 7]  
**Sent:** Tue 12/18/2012 7:56:52 PM  
**Subject:** VW Group Model Year 2014 SCR / AECD Approval Request for 3.0L TDI test group EADXJ03.04UG

Hello Jim, Linc and [Ex. 7]

Today we submitted a request for approval for SCR / AECD for our Model Year 14 3.0L TDI test group EADXJ03.04UG. This request is contained in a (single) PDF document including cover letter and supporting pages,

submitted under the following names:

EPA VERIFY: CBI\_EADXJ03.04UG\_RFA\_SCR\_R00

ARB DMS: CBI\_VOLK\_CORRESP\_RFA1SCR\_.PDF (see workflow  
2014\_CBI\_VOLK\_CORRESP\_RFA1SCR\_)

This MY 14 test group is based on the same engine used in current test groups for Q7 / Touareg but will now include several PC models (A6,A7,A8, A8L) as well as one light truck (Q5).

In addition, this test group will be amongst our first for MY14 certification, therefore we would kindly ask you to review this at your earliest convenience. Please contact me if you have any questions about this request.

Regards,

**Ex. 7**

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

**Ex. 7**

**To:** "Kata, Leonard" [Leonard.Kata@vw.com]  
**Cc:** []  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Tue 12/18/2012 8:37:01 PM  
**Subject:** VW Certification Preview

Len that's fine. Also, we are in the lobby room now so lots of room. I saw the pre-cert letter in Verify and printed it out. Are you bringing hardcopies or sending a revised version? Just wondering whether or not to make copies.

Hi Jim:

As we have mentioned, ARB would like the opportunity to listen in on the VW Certification Preview Meeting. I confirmed this earlier today with Ex. 7 our ARB certification representative. I have set up a call-in number and notified Bill McDuffee.

Just FYI, the number and conference ID are shown below. I would appreciate having a speaker telephone available in the meeting room (I think that this is usually the case).

(P.S. Does the room change mean I can wear a heavier sweater now?)

Best regards,

Len

Join by Phone

**Ex. 6**

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Kata, Leonard (EEO)"  
**Sent:** Tue 12/18/2012 9:53:05 PM  
**Subject:** RE: VW Certification Preview  
[snyder.jim@epa.gov](mailto:snyder.jim@epa.gov)

Hello Jim:

I will bring copies of the materials. Also, Dale Harris from my group will join me; so two from VW.

Best regards,

Len

---

Leonard W. Kata

Senior Manager

Emission Regulations and Certification

Engineering and Environmental Office

Volkswagen Group of America, Inc.

Phone: (248) 754-4204

Cell: (248) 797-3886

E-Mail: [leonard.kata@vw.com](mailto:leonard.kata@vw.com)

From: [Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov) [mailto:[Snyder.Jim@epamail.epa.gov](mailto:Snyder.Jim@epamail.epa.gov)]  
Sent: Tuesday, December 18, 2012 3:37 PM  
To: Kata, Leonard (EEO)  
Subject: VW Certification Preview



Len that's fine. Also, we are in the lobby room now so lots of room. I saw the pre-cert letter in Verify and printed it out. Are you bringing hardcopies or sending a revised version? Just wondering whether or not to make copies.

[IMAGE]

Hi Jim:

As we have mentioned, ARB would like the opportunity to listen in on the VW Certification Preview Meeting. I confirmed this earlier today with Ex. 7 our ARB certification representative. I have set up a call-in number and notified Bill McDuffee.

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Best regards,

Len

Join by Phone

**Ex. 6**

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Rodgers, William (EEO)" [William.Rodgers@vw.com]; Thomas, Richard (EEO)" [Richard.Thomas@vw.com]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Wed 12/19/2012 6:59:07 PM  
**Subject:** VW Group - Decision Information Submitted for Beetle Convertible TDI

Hello Jim,

Today we submitted vehicle information, test data and decision information for the Beetle Convertible TDI. As a reminder, this vehicle is an FEDV, and is a replacement for a previous vehicle which had a confirmatory test at EPA, but was deemed un-representative due to a mis-fueling event.

If you could, please let me know when you process the decision request. The VERIFY notification emails / broadcasts seem to not be working lately.

Otherwise, I hope you have an enjoyable and relaxing holiday break!

Regards,

Mike

Michael Giles

Certification Specialist

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

**To:** "Giles, Michael (EEO)" [michael.giles@vw.com]  
**Cc:** "Thomas, Richard (EEO)" [Richard.Thomas@vw.com]; Rodgers, William (EEO)" [William.Rodgers@vw.com]  
**Bcc:** []  
**From:** CN=Jim Snyder/OU=AA/O=USEPA/C=US  
**Sent:** Wed 12/19/2012 8:13:02 PM  
**Subject:** Re: VW Group - Decision Information Submitted for Beetle Convertible TDI

I submitted it for confirmatory tests.

Jim Snyder  
Light-Duty Vehicle Group  
Compliance Division  
United States Environmental Protection Agency  
(734) 214-4946  
snyder.jim@epa.gov

From: "Giles, Michael (EEO)" <michael.giles@vw.com>  
To: Jim Snyder/AA/USEPA/US@EPA  
Cc: "Rodgers, William (EEO)" <William.Rodgers@vw.com>, "Thomas, Richard (EEO)" <Richard.Thomas@vw.com>  
Date: 12/19/2012 01:59 PM  
Subject: VW Group - Decision Information Submitted for Beetle Convertible TDI

Hello Jim,

Today we submitted vehicle information, test data and decision information for the Beetle Convertible TDI. As a reminder, this vehicle is an FEDV, and is a replacement for a previous vehicle which had a confirmatory test at EPA, but was deemed un-representative due to a mis-fueling event.

If you could, please let me know when you process the decision request. The VERIFY notification emails / broadcasts seem to not be working lately.

Otherwise, I hope you have an enjoyable and relaxing holiday break!

Regards,  
Mike

Michael Giles  
Certification Specialist  
Engineering and Environmental Office  
Volkswagen Group of America, Inc.  
3800 Hamlin Road  
Auburn Hills, MI 48326  
United States of America  
Phone +1-248-754-4229  
FAX +1-248-754-4207

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**From:** "Giles, Michael (EEO)"  
**Sent:** Thur 12/20/2012 8:01:13 PM  
**Subject:** Page 8.1 - common section  
Page 8.1 CBI EVWXB COMMON APP INI R03.pdf

Hi Jim,

I found the missing page from the common section. I will submit a R03 of the common by Friday at latest.

Michael Giles

Certification Specialist

Engineering and Environmental Office

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3800 Hamlin Road

Auburn Hills, MI 48326

United States of America

Phone +1-248-754-4229

FAX +1-248-754-4207

Section 8	Pg. 1	Emission Testing Waiver	Engine Code	R.CH-No.:	Revision Date
Test Group		all	All		

8. Emission Testing Waiver Statements

*High Altitude Exhaust Emissions Compliance Statement*

In accordance with 40 CFR 86.1829-01 (b) (1) (ii) (B), The Volkswagen Group hereby certifies that, based upon engineering evaluation and high altitude emission tests conducted on similar vehicles, all vehicles of this test group comply with the high altitude exhaust emissions requirements.

*High Altitude Evaporative/Refueling Emissions Compliance Statement*

In accordance with 40 CFR 86.1829-01 (b) (2) (ii) (B), The Volkswagen Group hereby certifies that, based upon engineering evaluation and high altitude evaporative/refueling tests conducted on similar vehicles, all vehicles of this test group comply with the high altitude evaporative/refueling emissions requirements.

*Particulate Matter (PM)*

In accordance with 40 CFR 86.1829-01(b) (1) (iii) (B), The Volkswagen Group states that, based on good engineering judgment the vehicles of this test group are of a design substantially similar to existing designs that have particulate levels significantly below the standard, and that this vehicle design is expected to have similar characteristics. We therefore certify that, all vehicles of this test group comply with the particulate matter emissions requirements.

*Diesel Refueling Emissions Statement*

In accordance with 40 CFR 86.1810-01(2)(m) and based upon engineering evaluation the Volkswagen Group hereby certifies that due to the low vapor pressure of diesel fuel and the vehicle tank temperatures, hydrocarbon vapor concentrations are low and all vehicles of this test group comply with the 0.20 grams/gallon standard without a control system.

*Formaldehyde Emissions Compliance Statement*

In accordance with 40 CFR 86.1829-01(b)(1)(iii)(E), and based upon good engineering judgment, the Volkswagen Group hereby states that vehicles certified based upon NMHC emissions comply with the applicable formaldehyde emission standards.

**To:** Jim Snyder/AA/USEPA/US@EPA[]  
**Cc:** "Kata, Leonard (EEO)" [Leonard.Kata@vw.com]  
**From:** "Harris, Dale (EEO)"  
**Sent:** Fri 12/21/2012 3:05:28 PM  
**Subject:** VW GHG Pre Model Report  
[@vw.com](mailto:Leonard.Kata@vw.com)  
<http://www.volkswagengroupamerica.com/>

Jim

This note is intended to make you aware of that the 2014 GHG Pre Model year report has been submitted via the Verify system. The filename is:

CBI\_EVWXV\_COMMON\_CR1\_CAR.PDF

Thanks!!!

Regards,

Dale Harris

Certification Specialist

VOLKSWAGEN Group of America, Inc.

Engineering and Environmental Office (EEO)  
2930 Technology Drive

Rochester Hills Michigan 48309

United States of America

P: +1 248 754-4218

E: Dale.Harris@vw.com

<http://www.volkswagengroupamerica.com/>

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